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# REPORTS

OF THE

## EDINBURGH SURGICAL HOSPITAL,

*From May 1829 to May 1833.*

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QUARTERLY REPORT  
OF  
THE EDINBURGH SURGICAL HOSPITAL,  
FROM MAY TO AUGUST 1829.

BY JAMES SYME, Esq.

FELLOW OF THE ROYAL COLLEGE OF SURGEONS, AND LECTURER  
ON SURGERY.

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(*From the Edinburgh Medical and Surgical Journal, No. 101.*)

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IN the early part of this year several circumstances, with which it is not necessary to trouble the reader, induced me to resolve on the institution of a Surgical Hospital in Edinburgh. I was not unaware of the difficulty of the undertaking, but trusted that I should be able to accomplish it through the assistance of the medical students and of the public. I believed that the former, from the confidence which they were pleased to repose in me as a teacher of surgery, would support an hospital under my management from its commencement, and that the latter, from their benevolent feelings towards such establishments, would contribute to its maintenance so soon as they saw it fairly in operation and likely to succeed. Encouraged by these considerations, I calculated the expence of the undertaking, and ascertained, that, with accommodation and victuals for twenty patients, with suitable domestics, &c. it would not probably exceed L. 300 for outfit, and L. 700 for annual support. To defray these charges it appeared probable that the following funds might be realized:—

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Contributions from the public,	-	L. 100
Board of two house-surgeons,	-	200
Fees of students,	-	250
		<hr/>
		L. 550

There would still be left the expence of outfit and L. 150 annually. I made no doubt that the public would soon extend their support, so as to relieve me from this burden, but would willingly have agreed to submit to it permanently rather than not accomplish my object.

It fortunately happened that Minto House, a place familiar to most gentlemen educated in Edinburgh, at this time stood vacant. It was in every respect admirably calculated for the purpose in view, being situated close to the University, in a healthy part of the city, not actually upon, but immediately contiguous to, the densely inhabited ridge of the old town ; having extensive private grounds, containing fifteen rooms, besides a ground floor provided with every convenience, and having an abundant supply of water with water-closets even in the highest floor. It may be added, that one very large and elegantly constructed room eighteen feet in height was well suited for an operating and lecture-room. I lost no time in taking a lease of these premises for ten years. Through the liberality of the proprietor every part of the building and inclosures was subjected to a thorough repair, and the grounds were reformed so as to be more useful and agreeable.

While these operations were in progress the vacancy for two house-surgeons was announced, a prospectus for the information of the public was circulated, and a petition was laid before the College of Surgeons, to request their recognition of attendance upon the Hospital about to be established as a qualification for obtaining their diploma. The College, after mature deliberation, determined that, as their diploma was a qualification for general practice, they ought not to be satisfied with attendance upon a purely surgical hospital, but that there could be no objection to receive a course of clinical lectures on surgery, provided I chose to deliver one of the same extent and duration with that of the Royal Infirmary. I thankfully accepted this offer, which promised to answer fully the purpose of my petition, by enabling me to derive a revenue from my pupils without increasing the expence of their education, and by recognizing the respectability of the institution.

The College of Surgeons, in the alterations which have just been made in their curriculum, require eighteen months of hospital attendance, of which twelve months must be in a ge-

neral hospital containing at least eighty beds, and the other six, either in such an hospital, or in one purely medical or surgical. It is to be hoped that they will recognize for this purpose also the Surgical Hospital now established; but it is not proposed to make any application to that effect for at least a year, as the new regulation will only then begin to operate.

In order to satisfy the public that the institution was properly conducted, it seemed proper that the contributors should annually elect a body of directors, who might frequently visit the establishment, and report for the information of their constituents. In the meantime the following gentlemen kindly agreed to accept the office:—

Rt. Hon. the Lord Chief Commissioner.  
Lord Moncreiff.  
Sir Thomas Gibson Carmichael, Bart.  
Sir Alexander Maitland Gibson, Bart.  
James Gibson-Craig, Esq. of Riccarton.  
John Wauchop, Esq. of Edmonston.  
Professor Jameson.  
John Christison, Esq. Advocate.

James Ivory Esq. Advocate.  
Alexander Smith, Esq. W. S.  
Alexander Campbell, Esq.  
Rev. John Brown.  
John Hardie, Esq. Leith.  
Alexander Clapperton, Esq.  
Alexander Craig, Esq.

*Treasurers.*—Messrs Cunningham and Walker, W. S.

Dr Ballingall was good enough to accept the office of Consulting Surgeon.

Everything has turned out fully equal to expectation. In two days after the vacancies for house-surgeons were announced, ten applications were offered. The public have already contributed more than L.100 of annual subscriptions besides nearly as much of donations. And more clinical students applied than could be received, the college having restricted the number attending each course to forty, so long as the beds are not more numerous than at present, viz. twenty-four.

As it may now be reasonably expected that there will be derived from the public	-	-	L.150	0	0	annually		
From students,	-	-	350	0	0			
						—————		
						L.500	0	0

it is proposed to make the duty of the house-surgeons be performed in future by my senior apprentices, which will save the time and anxiety requisite for initiating strangers into the ways of the house, especially as it would be unreasonable to expect a succession of such excellent persons to fill this office as the gentlemen who now do so—Dr Cunningham and Mr Smith.

The Hospital is visited every morning at ten o'clock. In the first place, the patients residing in the house are examined, then the students assemble in the lecture-room, where the patients who are desirous of admission, and also those treated as out patients, are carefully examined before them. What seems

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interesting in the different cases is then pointed out, and questions are occasionally asked as to the diagnosis and treatment. I then perform what operations are required, and so conclude the business, which usually occupies about an hour.

The Hospital was opened for the reception of patients on the 8th of May. During the three months which have since then elapsed, 380 patients labouring under surgical disorders have applied to the institution for relief. Of these seventy have been admitted into the house.

There have been performed thirty operations, viz.

Amputation of thigh,	3	Excision of elbow joint,	2
——— arm,	1	——— cancerous sores	3
——— through tarsus,	1	——— warty excrescence	3
——— of great toe,	1	Fistula in ano,	1
——— thumb,	1	Hemorrhoids,	1
——— of finger,	2	Polypus nasi,	2
Excision of mamma,	2	Hypospadias,	1
——— tumour,	5		
——— upper jaw,	1		
			30

There have been two deaths, under the following circumstances : An old woman, Isabella Macdonald, was brought to the Hospital on the 22d May, very severely injured by the wheel of a loaded cart passing over her. There was a comminuted fracture of the left tibia and fibula about their middle, where an extensive cicatrix indicated the situation of a wound which she had received in her youth from the bursting of a blunderbuss. The left elbow was fractured through the external condyle of the humerus, and on the fore-arm of the same side there was a large lacerated wound exposing the fascia. She was a weak emaciated woman, between 50 and 60 years of age, equally infirm in mind and body, and was regarded from all the circumstances that have been mentioned as little likely to recover. Nevertheless, she did extremely well for about a week, the wound healed, and the fractures seemed to be in a fair way of uniting ; but on the seventh day it was observed that mortification had commenced at the injured part of the leg, and, as the system became affected at the same time, it was considered proper to afford the chance of amputation,—a slender one indeed, but still desirable in a case otherwise desperate.

Amputation above the knee by two lateral flaps was accordingly performed, and again the patient seemed about to rally. Her pulse, tongue, and appetite became natural, and the stump showed no tendency to mortification, but it did not heal by the

first intention, and the irritation attending the more tedious process by granulation proved too great for the feeble remains of her exhausted strength. She became hectic, rapidly sunk under an uncontrollable colliquative diarrhoea, and died on the 13th of June. On dissection there was found extensive ulceration of the large intestines, apparently of old standing.

The second death was that of Nancy Ker, aged 2 years, who died in an hour or two after admission, and therefore ought not, according to the usual custom of hospital records, to be ranked among the patients treated in the establishment. This child was brought in on the morning of the 12th July, on account of a severe burn received the preceding evening by falling into a pot of hot water. The extremities at the time of admission were cold, there was no pulsation in the limbs, convulsions speedily ensued, and death took place early in the day.

*Fractures.*—Of these, there were two of the thigh, one of the tibia and fibula, one of the tibia, two of the radius, two of the olecranon, two of the humerus, one of the clavicle, one of rib, one of metacarpus,—in all 13.

The fracture of the clavicle was cured without any deformity whatever, in a fortnight, by means of the simple bandage, which is founded on the principle of keeping back the shoulders, and elevating the elbow of the injured side with a sling, without placing any foreign substance in the axilla.

Both the cases of fractured olecranon were worthy of notice, on account of the absence of what is generally considered a characteristic symptom of this injury, I mean a separation or drawing up of the broken process to some distance from the shaft, by the action of the triceps. Sir A. Cooper has well observed, that this does not always happen, being occasionally prevented by the strong fibrous covering of the bone at the injured part remaining entire.

This observation is important, since a surgeon not acquainted with it might readily overlook the true nature of the accident, of which mistake I have met with more than one instance, though the diagnosis is still very easy, owing to the mobility of the fragment in a transverse direction.\*

*Excision of the Elbow-joint.*—This operation was performed twice, viz. on Janet Burns, aged 25, from Carnwath, and on John Wells, aged 9. The mode of procedure was the same as that detailed in the account lately published in this Journal of three cases where the operation was performed.

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\* I once experienced much difficulty in treating a case of this kind, from a morbid accumulation of synovia consequent on the injury. Having found more gentle means unavailing, I evacuated the fluid by a small puncture, and then speedily obtained a cure.

There was nothing in the previous history of these cases worthy of mention. They both laboured under well-marked caries of the elbow-joint, and would both, a short time ago, have been condemned to amputation without any ceremony. Janet Burns was harassed by a slight degree of chronic bronchitis, which delayed her recovery, and rendered the complete and permanent establishment of her health somewhat doubtful. She left the Hospital considerably better in this respect than when she entered it, and with the prospect of retaining a useful arm.

The boy was a most favourable subject for the operation. His disease resulted from external injury, a fall on the elbow, his constitution was good, and he possessed a most excellent disposition, which induced him to perform accurately whatever he was desired in regard to the position and exercise of the limb. Five weeks have now elapsed since the operation, and he is beginning to regain command of the joint, which is nearly as moveable as ever. I expect a most complete recovery in this case, which will be the more remarkable, as a very large portion of the ulna was removed. After sawing off the extremity of the humerus, and cutting away with the pliers the olecranon and head of the radius, I thought from the sound appearance of the different surfaces that enough had been done, and dressed the wound. But it fortunately happened that when the excised portions were afterwards more carefully examined, one of the gentlemen present, Dr Vallange, observed, that the cut surface of the olecranon presented a small carious cavity, a portion of which must consequently have been allowed to remain. I immediately undid the dressings, and by replacing the olecranon discovered the carious part, which was a sort of cylindrical excavation no wider than a common quill, but running deeply into the bone. Having ascertained its extent by introducing a probe, I insulated the ulna as far as was necessary, and cut it across through the shaft, so as to detach the whole spongy portion of the bone, which was then removed, though not without some difficulty, owing to the connexion of the brachia<sup>e</sup>us internus.

In this case the only muscle left undisturbed was the biceps; and the difficulty of moving the joint ought to have been if possible still greater than some people allege it to be, when merely the triceps is detached from its insertion. It has surprised me considerably to find that my pupils felt it difficult to conceive how the efficiency of the muscles could be restored in these circumstances, since there are so many parallel cases of every day's occurrence, for instance the use of a stump, which is so soon regained, owing to the muscles fixing themselves round the bone.

The difficulty of conceiving this very easy matter was, however, so great, that I requested Mr Y——, whose case is detailed in my former paper on this subject, to allow the gentlemen attending my clinical lectures to satisfy themselves by ocular and manual examination of the very perfect command which he was able to exercise over his arm. This gentleman is preparing to finish his education as a clergyman, and finds himself able not only to write sermons, but to execute all the ordinary motions of the arm.

*Amputation through the Tarsus.*—Ann Stewart, æt. 10, entered the Hospital on the 4th June on account of caries of the foot, which had existed two years, in consequence of inflammation induced by the fall of a heavy stone on the instep. There was an opening over the middle cuneiform bone, through which a probe could be passed perpendicularly and transversely in a curved direction to the head of the metatarsal bone of the little toe, indicating throughout its course the existence of caries. There was considerable thickening of the foot at the part mentioned, but higher up it was quite natural. Amputation of the foot had been proposed, but this I was unwilling to perform, as it seemed that the operation of Chopart could be practised with every prospect of success. Having obtained full permission from the parents to do whatever was thought proper, I proceeded as follows:—Having ascertained the situation of the joint between the astragalus and os naviculare by feeling the projection of the latter bone, and that between the os calcis and cuboides by observing the middle distance between the line of the fibula and head of the metatarsal bone of the little toe, I made a semilunar cut from the one to the other, and then, instead of dividing the articulations, which I think renders the subsequent formation of a good flap very difficult, transfixed the sole of the foot from one extremity of the cross cut to the other, and then carried the knife close along the metatarsal bones, so as to detach an ample but well formed covering for the face of the stump. The disarticulation was next effected with the utmost ease, so as to finish the operation in a very short time, and the plantar arteries being secured, the flap was retained in its proper place by five or six sutures.

The wound healed by the first intention, and the patient was able to put her foot to the ground in less than a fortnight. It was then observed, too, that she had regained the power of counteracting the extensors of the ankle, owing to the flexors having obtained new attachments. This is an interesting fact, as many people have objected to the operation on the ground of its leaving no antagonizing power to the gastrocnemius and other extending muscles of the joint, whence the heel would be drawn

up so as to point the cicatrix to the ground. Being in Göttingen some years ago, and seeing a patient on whom Langenbeck had recently performed the operation, I particularly inquired if, in his former cases, of which he had had two or three, any inconvenience on this account had been experienced, and was assured that there had not. The fact just mentioned will help to explain this. About six weeks after the operation, Ann Stewart came to the Hospital and walked into the presence of myself and pupils, when we were examining the out patients, so that I really could not from her gait fix upon the defective foot.

*Excision of the upper jaw.*—As this case was fully detailed in the last number of this Journal, I have only to state with regard to it, that the unfavourable prognosis then given has not been verified, in as much as though nearly three months have elapsed since the operation was performed, there is no appearance of a recurrence of the disease. I am at a loss to account for this, unless the separation of a very large slough about a week after the operation be considered a sufficient explanation. At all events, the man continues quite well, with the exception of a small gap in his cheek, and feels particularly comfortable in being freed from the distracting and incessant pain which formerly tormented him.

*Exfoliation of the whole upper jaw.*—The extraordinary case of an out patient may here be mentioned. Mrs C——, about nine years ago, when 20 years of age, became afflicted with a sore on the nose, for which, by the advice of a surgeon in town, she took very large quantities of mercury. The sore extended, the bones became affected, and a rapid exfoliation commenced, which soon deprived her of all the face, except the lower jaw and part of the ossa malarum. I first saw this wretched woman about four years ago, when she presented an appearance inconceivably shocking. The eyes were divested of their coverings, the pharynx was completely exposed to view, and the tongue lay exposed from root to apex, surrounded by the foul and vacillating teeth of the lower jaw, while the whole surface exhibited a most unhealthy description of ulceration. I saw her about six weeks ago, having not done so for a long time previous, and was surprised at the change which had taken place. A cure, so far as a cure was possible, had been completed; the whole ulcerated surface was healed, and the eyes were covered with a firm skin. She was miserably weak, and for a long period had subsisted on little else than laudanum, of which she took daily at least half an ounce. She died soon after this time, when I fortunately obtained the whole head, and ascertained that the remaining bone was every-

where perfectly sound. I do not know how this cure can be explained, except on the principle of the *Hunger Cure*; and think it may perhaps lead to a trial of this severe but powerful remedy in other desperate cases.

*Actual cautery.*—For some time past I have made much use of another remedy very fashionable in Germany, I mean the actual cautery, as a counter-irritant. In the *morbus coxarius*, and similar disease of the shoulder joint, the *Omalgia* of Rust, I have derived the most striking benefit from its employment. The only case affording fair opportunity for its application was that of William Aitkinson, æt. 36, a plasterer, who was admitted on 9th June labouring under extreme weakness and loss of command of the inferior extremities, with pain and weakness of the back, which was tender to pressure in the region of the loins. His complaints had existed for six months, and were increasing. I burned him very freely with the prismatic cautery of Rust on both sides of the spinous processes of the lumbar vertebræ, and had the satisfaction of seeing him improve daily, so soon as the slough separated. His improvement was regular and progressive, so that when dismissed on the 22d July, he laboured under awkwardness more than weakness of the limbs; he was able to walk quickly, and even to leap with both feet,—in short, had the prospect of a perfect recovery.

*Amputation of thigh.*—One of the most interesting cases was that of John Parkinson, æt. 10 years, who entered the house on the 17th June on account of what seemed at first sight phlegmonous erysipelas of the left leg. The whole limb from the ankle to the middle of the thigh was much swelled, red, and excessively painful. Having learned that these complaints had existed for nearly a week, notwithstanding the repeated application of leeches, and observing that the pain, which was chiefly referred to the inner or tibial side of the knee, appeared to be more agonizing than that usually occasioned by inflammation of the skin and subcutaneous tissue, I suspected that the mischief was deeply seated. On the following day, perceiving an obscure sense of fluctuation, I made several free incisions into the limb, and evacuated a great quantity of bloody pus. The limb became much less tense and painful, and I hoped that my diagnosis had been incorrect, but this prospect of amendment was soon blighted. The pain, though diminished, still continued, the discharge was profuse and unhealthy, symptoms of hectic made their appearance; and when the different openings over the tibia were examined by a probe, the bone was found to be completely insulated from the soft parts. The bone having thus died without providing a substitute, it seemed to

me impossible to save the limb ; but as many people would have thought me rash had I acted immediately on this conviction, I resolved to wait until the affair was more clearly decided. He became weaker and weaker ; he passed frequent stools tinged with blood ; and on the 30th he was so very low, that I blamed myself for having waited so long, and feared that amputation would hardly save him. Another unpleasant symptom also now appeared, viz. a swelling of the lower third of the thigh, evidently connected with the bone, and extreme tenderness on pressure, which led us to apprehend that the femur was about to die like the tibia. Discouraging as these circumstances were, we resolved on the operation, as affording the only chance, especially as it would be the most likely means of checking inflammation of the femur, if it existed, and of facilitating the removal of any exfoliation that might ensue from it.

The operation was performed as usual by two lateral flaps. On examining the limb, we found, that, with the exception of a small part near the ankle, the tibia was dead throughout its whole extent ; even the epiphysis of the knee had perished, and lay bathed in the contents of a great abscess, which distended the joint, and reached up the thigh so far, that the incisions of the operation had almost opened it, though they were made purposely very high, to avoid the suspected part of the bone.

The diarrhoea and other unpleasant symptoms disappeared soon after the operation, under careful medical and dietetical treatment. By the end of a fortnight the wound was healed, and the patient seemed safe, but he then began to droop, his diarrhoea and other hectic symptoms returned, and matter issued profusely from two small apertures in the cicatrix of the stump, which became somewhat swollen and tender to the touch. He continued in pretty much the same state for another fortnight, when we judged it expedient to send him home (Leith Walk) to try the effect of a change of air, and gratify his own ardent longing. About a week after his return, which was on the 22d July, he began to improve, his hectic symptoms left him, and the stump contracted to its proper size. A probe being then introduced through one of the openings above-mentioned, encountered an exfoliation partially detached but not loosened from the femur. When it separates, an opening must of course be made for its extraction ; but unless some adverse change takes place, there can now be little fear as to his ultimate recovery.

This case is interesting in several respects. Though the phalanges of the fingers too frequently perish through their whole extent, in consequence of the acute inflammation, which occurring in this situation is designated paronychia, it is rare

to meet with a similarly speedy and complete destruction of the large bones. It is true that some people who still believe in the possibility of dead bone being absorbed by the living vessels, or dissolved by the pus, may entertain a different opinion. This is not a proper occasion for entering on discussions respecting necrosis, otherwise it might easily be proved that the whole shaft of a bone very rarely dies entire, and that, when it does so, there is either no reproduction, or the substitute has been formed more or less completely previous to the demise of its parent.

In this case the destruction was not confined to the shaft, but extended into the knee-joint, contrary to the tenet of some writers, that the epiphyses are exempt from necrosis. There are several preparations in my museum which show the same thing, particularly one of a tibia, which was lately given me by my friend and former pupil, Dr Arrot. It was amputated by his brother in Arbroath, on account of extensive abscesses of the knee-joint.

The exfoliation also which is now going on, notwithstanding the speedy and apparently perfect union of the flaps, is interesting as an indication of the tendency to die, which is occasionally observed in the whole osseous system. Every practical surgeon must have noticed cases where the shafts of almost all the bones of the body were affected with necrosis, just as their heads are at other times occupied by scrofulous caries.

*Amputation of the thigh.*—William Macintyre, aged 54, entered the Hospital on 29th July, on account of a diseased state of the inferior extremity, which made him desirous to part with it. The foot presented an extraordinary appearance, being greatly enlarged, and strangely altered in form, so as to constitute a shapeless unwieldy mass, equally useless and unseemly. He stated, that for the last five or six years he had suffered from repeated and almost uninterrupted attacks of inflammation and suppuration of the limb, in the course of which most of the toes dropped off. There was still a large sore in the fore part of the foot, but most part of its surface, together with that of the leg, was covered with thick cicatrices. The patient suffered little, except from unwieldiness of the limb, owing to the weight of the foot, and stiffness of the ankle-joint, which, by preventing him from placing the heel on the ground, rendered progressive motion quite impossible, except by means of crutches, but he was rendered so unhappy by this state of helplessness, as to desire the only relief which it was in our power to afford—removal of the limb. The thickened and indurated condition of the soft parts rendered it impossible to obtain a covering for the bones any lower than the highest practicable

point for amputating below the knee, viz. at the tuberosity of the tibia, and here only by forming two equal flaps according to the plan described in a former number of this Journal. This operation having been performed, we were sorry to find that the bones presented such an unhealthy appearance, as precluded any reasonable prospect of a cure, and therefore, however unwillingly, determined on repeating the amputation above the knee. This was immediately done, the popliteal artery, which alone required a ligature, was secured, and the edges of the wound being stitched together and suitably dressed, the patient was conveyed to bed wonderfully little exhausted by his sufferings. He did extremely well afterwards, with the exception of some nausea and vomiting on the third day, and has now every prospect of a speedy and perfect recovery.

*Amputation of fore-arm.*—John Baxter, a white faced unhealthy looking boy, had for six or eight months laboured under a scrofulous enlargement of the wrist, with caries of radius. I did not think this in any respect a proper case for excision of the diseased bone, and therefore amputated the hand by two flaps. Dissection proved the necessity of the operation, by showing the whole synovial apparatus of the carpus greatly thickened, and completely degenerated into the true gelatinous condition which indicates the scrofulous action. The radius was even more widely diseased than had been supposed.

*Amputation of fingers and toes.*—It was necessary to remove several fingers and toes on account of the destructive effects of paronychia and caries of the articulations. The amputations were all performed at the metacarpal and metatarsal joints by two lateral flaps, which were not made, however, quite according to the plan of Lisfranc, who forms one while cutting into the joint, and the other when cutting out from it. This method answers very well where the parts concerned are in their natural state as to softness and laxity, but can hardly be accomplished without injury to one or other of the flaps where they are thickened and indurated, in consequence of the preceding inflammation. In such cases, I think it is much better to form the two flaps previous to opening the joint, and even make a little dissection if it is required, to separate their preternaturally firm connexion to the subjacent parts.

Though the bad consequences of leaving an articular surface in amputation are certainly by no means so great as they were formerly supposed to be, it cannot be denied that the wound, after apparently being nearly or entirely healed, is subject to repeated attacks of pain and redness, with more or less discharge of thin serous matter. This disturbance, which is doubtless to be ascribed to irritation attending the removal of the cartilage

by absorption, occurs more frequently and to greater extent when the disease requiring amputation is acute, than when it is chronic, of which there was a good illustration when the cases in question were contrasted with that of amputation through the tarsus, since in three of the former there was considerable trouble from the source referred to, while in the latter the much more extensive articular surface offered no obstacle to the cure.

It would, I am convinced, be a prudent precaution in removing fingers, where the integuments concerned in the operation are altered by the disease, to take away the articulating extremity of the remaining bone. This can be readily done with cutting pliers, and will prevent any risk of the bad consequences above-mentioned. Thus, in operating on Robert Loughhead, a stout overfed porter, whose great toe was carious, in consequence of a bruise received some weeks previous to admission by the fall of a heavy box, and where the integuments were much thickened, &c. I cut off the round articular head of the metatarsal bone.

*Excision of mamma.*—Mary Messer, æt. 38, from Torwoodlee, had been afflicted for nearly three years with all the symptoms so well described by Sir A. Cooper under the title of irritable tubercle of the breast. About two years ago she consulted me on account of these complaints, when I recommended the use of means proper for restoring the uterine secretions, which had long been very irregular, and for three months previous to that time altogether suppressed. She complied with these directions, and in the course of a week had a return of the interrupted discharges. Her complaints were then much alleviated, and continued to be so for several months, when, though the uterine actions continued regular, the symptoms of her complaint became considerably aggravated, and at length the almost incessant, occasionally most unsufferable, pain of her breast shooting into the arm, shoulder, and side, tormented her so grievously both night and day, that she resolved on having the disease removed by the knife. With this view she was sent to the Surgical Hospital by my friend Dr Anderson of Selkirk.

Conceiving it right to comply with the patient's urgent desire to have the breast excised, since all other means of relief had failed, and success had attended extirpation of the testicle when similarly affected, I performed the operation on the 13th May. The wound healed by the first intention, and she left the Hospital on the 23d, quite free from her former sufferings, and in a state of mind very different from the extreme dejec-

tion and anxiety which characterised it previous to the operation. According to the latest accounts from Dr Anderson she continues perfectly well. The breast on dissection exhibited the appearances described by Sir A. Cooper, being merely more dense and uniform in structure than usual.

*Excision of Mamma.*—Janet Anderson, æt. 40, entered the Hospital on the 8th of May, on account of a scirrhus mamma, which had recently suppurated to a small extent on the surface; it was removed a few days afterwards, the wound healed by the first intention, and she would have been dismissed as quickly as the last mentioned patient, but an abscess formed in the axilla, which excited our worst suspicions, and induced us to detain her for some time longer. Fortunately this abscess did not turn out to be malignant, but healed most satisfactorily, and the patient was dismissed quite well on the 18th June. She returned a few days ago to show that she continued free from complaint, and offer thanks for the care which had been bestowed upon her, previously to departure for the north.\*

Margaret Mathieson, aged 23, was recommended to the Hospital on the 10th of June by Dr Johnston of Kirkaldy, on account of a very large and exceedingly hard tumour in the axilla. It filled the axillary cavity so completely as to prevent the arm from being approximated to the side, and was occasionally the seat of severe lancinating pain. It had existed more than half a year, and was continuing to increase progressively. Notwithstanding the youth of the patient, the symptoms just mentioned would probably have induced me to remove the tumour, had other circumstances been favourable to this proceeding, but it was rendered quite impracticable by the firm connexions of the tumour, and even if this objection could have been overcome, the existence of many hard tumours of a smaller size in the neck and throat would have rendered an operation quite unjustifiable.

It occurred to me, that, as the uterine discharges were suspended, advantage might result from the internal administration of cantharides, especially as this medicine has a very remarkable effect in promoting the action of the absorbent vessels in general. In no long time after commencing the course prescribed to her, she noticed a remarkable diminution not only of the pain, but also of the swelling, and regularly improved

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\* It has afforded me equal pleasure and surprise to find that the patients of the Surgical Hospital have manifested by their conduct and expression much more gratitude for the attention bestowed on them, than is usually met with in treating people of the lower orders, especially in hospitals.

until the 10th of July, when, being comparatively speaking well, she returned home in great joy at her recovery.

*Warty Excrescences.*—Of these the most remarkable was that of J. M., aged 32, who was admitted on the 8th of June to be relieved of a most painful and unseemly growth from the glans and prepuce. Some months previously he had had the prepuce slit open on account of warts which continued to increase after they were exposed to view, so as at length to occasion the frightful mass for which he sought relief. A very small part of the anterior part of the glans was visible ; behind this there was a hard irregularly tuberculated tumour about the size of a small orange, from which proceeded a most foetid discharge, and frequent severe burning lancinating pains shooting into the groins. It is not improbable, that when pathological distinctions were less attended to than they are at present, this tumour would have been at once regarded as cancerous, and considered a sufficient warrant for amputation of the penis.

Concluding, from all the circumstances of the case, that the disease was not malignant, I cut away the excrescence by means of a straight sharp-pointed bistoury introduced between it and the glans, so that the morbid part was detached in the form of a ring. Some small portions which remained were afterwards easily taken away by scissors. The wound was dressed with dry caddis ; it healed most kindly, and permitted the patient to depart in a fortnight.

*Hæmorrhoids.*—Of this disease a very severe case occurred in a young man, John Begrie, æt. 22, from Greenock, who had for many months been harassed by frequent and painful stools, with purulent and bloody discharge. He had suffered several operations, as he said for fistula, and believed that his complaints depended on stricture of the rectum. On examination I could not find any contraction of the gut within reach of my finger ; and before subjecting him to the exploration of bougies, I determined to remove several large vascular and painful hæmorrhoids which existed round the verge of the anus. There were several more excrescences of the same sort within the sphincter, but it did not seem to me prudent to interfere with them, at all events in the first instance, since the removal of external piles so frequently cures those which are internal. I accordingly excised the first mentioned tumours by means of double hooked forceps and scissors, and had the satisfaction of finding my prognosis amply verified, as the patient left the establishment in a few days restored to health.

*Fistula in ano.*—There was only one operation performed for this complaint, and it was interesting merely as an instance

of the extreme facility with which this formerly so much dreaded disease may be cured by the improved practice of modern surgery. It appears that the circumstances of most importance to be recollected are, 1<sup>st</sup>, That the internal opening must be included in the incision of the sphincter; 2<sup>d</sup>, That when the internal opening exists, which it almost invariably does, it is situated very close to or rather at the sphincter; 3<sup>d</sup>, That it is not necessary to divide the gut higher than the internal opening; and *lastly*, that no dressing ought to be interposed between the cut edges, at all events not after the second day. It is truly astonishing that so many practitioners should still remain unacquainted with these important facts which lead to a practice as simple and successful, as the one, or rather the many, which preceded it, were operose, distressing, and inefficient.

It is particularly to be regretted, that the observation of M. Ribes, in respect to the situation of the internal opening, should have met with so little attention in this country.

John Finlay, æt. 45, had suffered for many months from fistula in ano. The operation was performed on the 17th June, and he left the Hospital eight days afterwards in such a state of convalescence, as enabled him to resume his employment of night patrol in the police establishment; and, to use his own words in a letter of thanks addressed to me the other day, "has been on duty ever since both wet and dry, has not experienced the least symptom of his complaint, and is now as sound and stout as he ever was in his life."

At the same time with this patient, I operated upon a gentleman who had long been harassed in the discharge of his military duties, by a similar complaint. On the second day after the operation, he dined abroad at some distance in the country, and in a few days more departed for London, where what remained of the wound healed without any trouble, so that he returned in perfect health. Fistula in ano is too frequently connected with morbid conditions of the lungs and intestines, equally fatal and incurable; but where it exists without such complication, ought to be regarded as one of the most simple and satisfactory subjects of surgical practice.

*Hypospadias.*—The case of John Sparks, æt. 2½, labouring under congenital hypospadias, was remarkable, in so far as, besides the preternatural aperture at the neck of the glans constituting the disease, there was an appearance of the proper opening, separated from the former by a bridge of skin. On introducing a probe into the superior or proper opening, I found that it did not lead to the urethra, but terminated in a narrow *cult de sac*, about half an inch deep. The preterna-

tural opening was extremely small, indeed hardly visible, and it was on account of the difficulty of voiding his urine through it that the patient's friends brought him to me in quest of relief. It would have been easy to afford temporary relief by dilating the unnatural opening; but it seemed to me better to perform the operation so as to attain this object, and also prevent the future inconvenience of being unable to effect impregnation owing to the dependent position of the orifice of the urethra. I therefore divided the septum between the two canals, and propose, so soon as the wound is healed, to close up what is necessary at the lower part of the opening, so as to give it the proper direction.

*Cancer of the Lip.*—The general or rather invariable plan of removing cancerous sores of the lip followed in this country is to include them in two oblique incisions, which unite at an angle, more or less acute, towards the chin. When the disease affects the lip to much depth, this proceeding is probably the most advantageous that can be adopted, but when it is superficial, and especially when the surface is extensively affected, it is equally injurious and unnecessary. In such cases the surface alone requires to be removed, and if this be done properly, instead of the hideous deformity which results from removal of the lip, there is hardly any alteration to be perceived. It is in such cases that the plan recommended by Richerand in the *Annuaire Medico-Chirurgicale* is decidedly preferable to the common one, which ought to be restricted to those occasions where the lip is deeply affected. I find on a comparative trial with other means that the curved scissors are by far the most convenient for effecting the removal in question ; but instead of healing the wound by granulation, according to the advice of Richerand, it is much better to unite the skin and mucous lining of the lip by means of sutures, either twisted, or what answers better, interrupted.

George Angus, æt. 50, from Limekilns, applied to the hospital on account of a sore on the lower lip, which had existed for two years, and resisted all the ordinary measures for its cure. There were two horny excrescences proceeding from it, and the patient complained of occasional pain. As there was no induration of the lip under the base of the sore, I removed it with the curved scissors at one cut, and sewed the edges together. The patient suffered no inconvenience, and returned home in three days without the slightest deformity.

*Tumour of orbit.*—Edward Ramage, aged 3, from Selkirk, was sent to town by my friend, Dr Anderson, on account of a tumour of the orbit which had existed or rather been noticed for six months. There can be little doubt that it was of older standing, since the first thing that attracted attention was

the one eye being smaller than the other, in other words, the distension of the lower eyelid so much that it prevented the eye from being seen. The patient latterly complained of pain in the swelling, but continued to enjoy the most robust health. I made an incision on the tumour in the direction of the fibres of the orbicularis palpebrarum, and exposed its surface so far as was possible by dissection. Having ascertained, what we had previously every reason to expect, that it went back into the orbit, I attempted to disengage it from the surrounding parts, but finding that it rested closely on the orbital plate of the maxillary bone, I removed the bulk of the mass, and then, by careful manipulation with my fore-finger, dislodged what remained. The pieces when put together seemed to be perfect, and nothing more of it could be felt in the orbit. The tumour possessed a very dark colour, and so far might be called melanotic, but, instead of having the friable, granular or almost semifluid consistence of the morbid formation usually designated by this title, it had a fibrous structure more like that of the worst species of osteo-sarcoma. Our prognosis, therefore, as it might be supposed, was not very favourable. The patient, however, did well, and in the course of a fortnight returned to the country, where, the last time I heard of him, he was running about as usual.

*Hydrocele.*—There were only two cases of hydrocele, but both rather interesting. The first was that of William Macintosh, æt. 28, a north country cattle drover, who entered the Hospital on the 17th May, labouring under the following complication of diseases:—Sores on the penis, bubo, ague caught on passing through some of the fenny districts in England, and a hydrocele of nine years standing. Having subdued his other disorders, I punctured the hydrocele, and evacuated a large quantity of chocolate-coloured fluid, holding in suspension many of those small shining scales which my friend Dr Christison has found to be Cholesterine. As there was much enlargement of the testicle, and great thickening of the sac, we did not think it right to inject, and proposed to the patient to perform either the old operation of excising the sac, that is to say, a portion of it, or the more simple process of castration. He preferred the latter, but before submitting to it, found it necessary to return to the north to execute some business of importance. It is this sort of hydrocele which has been named hæmatocèle, and probably with some réason. In the case just related it was observed, that when the dark brown fluid was allowed to stand quietly in the glass, a quantity of pure blood collected in the bottom, and in another case formerly under my care, the hemorrhagic nature of the disease was still more manifest. I punctured a large hydrocele, and drew off a quantity of the same sort of fluid as

above described; but finding that by far the greater part of the swelling still remained, and that the patient, who for several years has been frequently prevented by fits of pain from following his avocation for weeks together, was now suffering more than ever, I proposed removal of the testicle, and performed the operation with perfect success. On examining the tumour, I was not a little surprised to find the testicle quite sound, and that what had led me to think it enlarged was a great mass of dense fibrinous matter, which adhered no less firmly to the tunica vaginalis than the coagulum of an old aneurism does to its inner surface.

The other case of hydrocele treated in the Hospital was that of Alexander Wood, aged 24,—a well marked case of hydrocele of the cord. I drew off the contents, which were perfectly pale and limpid, but did not inject, since it seems that dropsy in this situation is not so apt to return after evacuation as when it is seated in the tunica vaginalis.

The patient accordingly had a very slight return of the swelling, which soon subsided, and he has been dismissed cured.

*Compound fracture of the wrist.*—Kenneth Mackenzie, aged 38, a sailor on board a merchant vessel, while at Marseilles, about five months previous to his admission, fell from the top of the main-mast, and, besides sustaining other injuries, fractured the left wrist. He was long in the hospital at Marseilles, and since his discharge had assisted in the escape of several small pieces of bone. Judging from the smooth surfaces and angular edges of these pieces which he had preserved, that they had been detached by violence and not by ulcerative absorption, I concluded that the sinuses, pain, and swelling of the extremity which still continued, were owing to some other loose fragments still remaining, and, having detected one with the probe, lost no time in removing it. He immediately began to improve, and though the joint remained stiff, the laxity of the integuments, the freedom from pain, and the drying up of the discharge, proclaimed a most beneficial alteration.

It was my intention to have detailed some other remarkable cases, particularly one of a wonderfully extensible state of the skin, similar to the well-known one of the Spaniard recorded by Job a Meekren, or that of Eleanor Fitzgerald by Mr John Bell, and also to have made some general observations on other surgical subjects, particularly the treatment of burns, glandular swellings, and ulcers, of which there were a great many of all descriptions, especially among the out-patients. The results of blistering old indolent sores in imitation of the natural cure, which is occasionally observed to happen after an erysipelatous affection of the ulcerated limb, appeared among these deserv-

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ing of notice. But this report has already attained such a length that it would be improper to prolong it any further.

Many people thought it rash in me to undertake a clinical course before having a single patient in the Hospital; but I trust that what has been said here will be sufficient evidence that materials for the purpose were not wanting. And there can be no doubt, that now when the Hospital is fully established, and every day becoming better known to the suffering poor, it will be in my power to increase the interest not only of my Clinical Lectures, but also of the Reports, which it is my intention to publish regularly through the medium of this Journal.

It would have been tiresome to mention all the occasions on which I derived advantage from the sound judgment of my excellent colleague; but I cannot conclude the present report without expressing my grateful sense of the acknowledgments due from all connected with the establishment to Dr Ballingall, for the manner in which he discharged his duties as consulting surgeon.

*75, George Street, 8th August 1829.*

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*Quarterly Report of the Edinburgh Surgical Hospital from August to November 1829.* By JAMES SYME, Esq. Fellow of the Royal College of Surgeons, and Lecturer on Surgery.

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(From the *Edinburgh Medical and Surgical Journal*, No. 102.)

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SINCE the date of last Report, the cases of surgical disease, for which relief has been sought at the hospital, have increased in number and importance.

553 patients have applied within the last three months. Of these 64 have been admitted into the house, and the remainder have been treated as out-patients, receiving advice and medicines from the institution.

It was my intention to have written a report of the more interesting cases which have occurred within the period above-mentioned; but I find that my Systematic and Clinical Lectures, together with my professional avocations in private, do not afford me the requisite leisure for this purpose at present. I will therefore, in the meantime, merely make some observations on the treatment of ulcers, and at a more convenient opportunity take a review of the other cases.

The very great number and variety of ulcers which have been presented at the hospital, afforded me ample opportunity of illustrating the treatment of these most frequent and distressing affections. I felt much satisfaction in doing so on several accounts. 1<sup>st</sup>, The great relief derived by the patients, many of whom were restored to the means of earning a livelihood, of which they had previously been long deprived. 2<sup>d</sup>, The useful instruction derived by my pupils, who were wise enough to regard the ordinary duties of their profession as deserving of at least as much attention as those great and bloody exploits, which occur but seldom in the course of practice. 3<sup>d</sup>, The widely extended and sound reputation acquired by the new Institution from curing diseases, where the relief is so great and manifest, and the means of remedy are so little disagreeable.

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It would be out of place for me to enter here into a detail of cases which are usually reputed trifling and uninteresting, though there are few surgical diseases which more seriously affect the patient's comfort; but I cannot refrain from reporting at some length, and with some care, the advantages of a practice which I have lately introduced in their treatment, and which I believe is a new one.

In treating what are called Indolent ulcers of the leg, I used to regard the plan recommended by Mr Baynton as approaching nearly to perfection, and still believe that, when properly executed, it will sooner or later effect a cure, if a cure be practicable; but another method has lately suggested itself to me, which seems in many respects preferable.

It is not unusual to meet with cases of indolent ulcers, which after exhibiting their characteristic obstinacy in opposition to the most careful treatment, heal up at once without any attention, so soon as the limb begins to recover from an attack of phlegmonous erysipelas which it has happened to suffer. The observation of such cases led me to try the effect of inducing a similar inflammation artificially, and the result has fully equalled my expectations. The means employed for this purpose were blisters, and the object being to excite a smart and diffuse inflammation, they were not limited in extent to the size of the sore, but were made to cover a great part of the limb, and were allowed to remain in operation for a long while, sometimes even twenty-four hours.

The first effect of the blisters in these cases is a more than ordinary inflammation and discharge, the surface sometimes continuing to suppurate profusely for several days, just as if the cutis had been denuded by a scald or burn.

In a day or two the patient is agreeably surprised by observing that the œdematosus swelling of the limb, which so constantly accompanies ulcers of the kind under consideration, begins to subside, and in the course of a very short time, rarely exceeding a week or two, it nearly or entirely disappears. The consequence of this detumescence is a great diminution in the size of the sore, which also comes to be on a level with the surrounding skin. Then the surface takes on a healthy granulating appearance, and the sore heals, partly by contraction, partly by the formation of a cicatrix. For the first few days after the blister has been applied, some simple ointment may be used, just as in the ordinary treatment of a blistered surface, and afterwards a wash of acetate of lead or sulphate of zinc, in the proportion of one or two grains to the ounce. If the sore should again prove obstinate, the blister may be repeated, and if a small part remains stationary towards the conclusion of the

cure, it ought to be filled with the red oxide of mercury, or a mixture of this powder with flour. My friend, Professor Davidson of Aberdeen, induced me to try this application in the treatment of ulcers, and I cannot say too much in its praise, especially in the case just mentioned. After one or two dressings it forms a firm crust over the sore, which ought not to be disturbed, and renders any farther interference unnecessary.

I have no hesitation in ascribing the good effect of blisters which have been just described to their stimulating the absorbent vessels, so as to remove the œdema. We know that blisters possess a singular power of doing this, as is exemplified in the cure of dropsies of the joints and bursæ, and it is easy to see that the existence of œdema must be an insuperable obstacle to the healing of the ulcer. It prevents the contractile effect of the granulating action, and thus occasions a struggle, which probably gives rise to the pain and other symptoms that so often induce a resemblance between indolent and irritable ulcers. And we find, in fact, that all the modes of treating the ulcers in question which have ever proved serviceable, such as the horizontal posture, the roller of Underwood and Whately, or the adhesive straps of Baynton, tend to reduce œdematosus swelling. Some frivolous and wrong-headed improvers have advised that the straps should not encircle the whole limb, but only two-thirds of it, and in so far have done what they could to bring themselves and the practice into contempt. I lately cured an ulcer on the leg of a lady which had existed without interruption for twenty years, and was deemed incurable, because it had resisted the most assiduous exertions of several surgeons in town. When I proposed to apply adhesive plasters, the patient would hardly consent, because they had been tried previously without success. I ascertained that they had not encircled the limb, and hence the failure.

In order to appreciate fully the good effects which attend the removal of œdema, it is necessary to have clear ideas of the process that is employed in the healing of an ulcer; and as it seems to me that the truth in this respect has been, and still is, very much overlooked, I may perhaps be excused for making a few observations on the subject.

It is a common remark, that the things which lie most within our sphere of observation are least attended to, and there is no better illustration of this than the subject which I am now going to discuss. Every wound, when it does not unite by the first intention, and every ulcer, if it heals at all, heals by granulation, and yet nobody takes the trouble of inquiring into the precise nature of this process, every one being satisfied with the vague account of it which is to be found in surgical books.

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The statement generally contained in these is, that lymph being effused on the surface of an abscess, wound, or ulcer, becomes organized, and formed into a layer of small red, pointed fleshy granulations ; from these pus, together with coagulable lymph is secreted, and the new crust of organizable matter is in its turn converted into granulations. “ In this manner layer after layer is formed, until the cavity is filled up.”\* Such is the explanation usually or rather universally given, and as generally considered satisfactory.

Instead of attempting to disprove the accuracy of this description of the mode in which losses of substance are repaired, by criticising the process itself, I will at once endeavour to show, that the alleged reproduction does not really occur ; that the appearances which are thought to establish its reality are delusive ; and that, therefore, the explanation employed to account for it is equally unnecessary and erroneous.

The subject of Reproduction or Incarnation engaged the attention of the French Academy of Surgery ; and the memoirs of its members, Fabre and Louis, leave little wanting with regard to its history. How they have happened to be so completely forgotten in modern times, as to permit the old doctrine of regeneration to revive and flourish to the suppression of the truth, I cannot tell, but shall attempt to place the matter once more in a clear point of view.

The arguments in favour of reproduction by granulation are, 1. the regeneration of lips, tongues, and the glans penis completely or partially destroyed ; 2. the filling up of abscesses or sinuses ; and 3. the healing of wounds attended with loss of substance.

When we come to inquire a little particularly into these proofs, we find, that of regenerated lip there is only one instance on record ; and if M. Louis’s account be correct, not much weight ought to be founded on it. Louis says, that M. Pibrac and he were invited to visit this famous lip, in order to satisfy themselves of its actual regeneration. The loss of substance, they were told, had been so great, that it was impossible to unite the cut edges ; that it had even been necessary after the excision to apply the actual cautery to the roots of the disease ; that eventually the patient was cured ; that the lip was restored ; and that they should be lost in admiration of this wonderful work of nature. “ We visited the patient,” says he, “ and saw nothing at all extraordinary. The patient had been freed from a tumour, the extirpation of which might at first sight have seemed to require removal of the whole lower

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\* Sir Astley Cooper’s Lectures, Vol. i. page 161.

lip. But it is well known that when a part is much swelled, a large portion may be taken away without diminishing its natural extent ; and this is just what had happened in the case under consideration. The lip, properly speaking, was completely wanting, so that the teeth and gum appeared through the breach. *The loss of substance had not been repaired.* A perpendicular cicatrix denoted that the lower part of the wound had been closed by the union of its edges. The patient was unable to retain his saliva, and the skin of the chin, which had been drawn up to supply the lip in part, and which had been taken for the product of regeneration, was covered with its characteristic *beard*. The great breach caused by the operation had been in some measure closed by contraction, but not one particle of the lost substance had been regenerated."

If this be the true account of the lip, I certainly feel inclined to agree with M. Fabre, that the "well formed proportioned glans," which Mr Jamieson of Kelso had the pleasure of seeing reproduced after "amputating the Balanus, preputium, and a small portion of the corpora cavernosa penis," was nothing more out of the ordinary course of nature than the original glans itself, which had been concealed from sight by the swelled and gangrenous prepuce. If the alleged reproduction admits of this explanation, in regard to the lip and glans penis, it is evident that we should pay little attention to the evidence afforded by the separation of sloughs from the tongue, where it is so difficult to ascertain the extent of destruction and also of restoration, owing to the great extensibility of the tissue composing this organ.

As to the filling up of abscesses, it ought to be recollect ed that the cavity which contains the pus is not formed by the destruction of any tissue, but by distension of the skin and subjacent organs, whence evacuation of the fluid is followed immediately by such collapse and approximation of the surrounding parts as nearly obliterates the hollow. And where there is really a destruction of cellular substance, as in the abscesses of weakly children, a permanent depression remains after the cure is completed. Sinuses are healed on the same principle, viz. by coalescence of the sides ; and every attentive practitioner must have observed the great advantage of laying them together by means of proper bandages, so soon as they are disposed to unite.

Lastly, as to the healing of ulcers or wounds attended with loss of substance, it is well known that the resulting cicatrix is always smaller than the original sore ; and that there is invariably a depression of it proportioned to the destruction of parts. M. Fabre quotes the case of a wound in the thigh destroying

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the muscle and exposing the bone, the cicatrix of which rested directly on the bone without the interposition of any newly formed substance. It was a similar case which led my attention to this subject. M. Bezoet of Rotterdam, who wrote against the doctrine of reproduction, appeals to a case of wound in the head, where a portion of the scalp was removed, and where, notwithstanding the most luxuriant granulations, the cicatrix rested on the bone. I have in my possession several skulls, with the scalps, from which portions of bone had been removed, artificially and naturally. One of these belonged to a gentleman who was attended by myself, and in all of them the cicatrix is but a pellicle resting on the bone or *dura mater*.

When amputation was performed in the old way by cutting directly through all the parts, a very large granulating surface resulted, which ought to have become larger if there really was a growth of new substance, so as to form the stump into a bulbous figure. But it always happened, on the contrary, that the cicatrix was much smaller than the wound, and that the stump, so far from being bulbous, was of a sugar-loaf or conical form.

We have frequently an opportunity of dissecting a granulating sore after death or amputation. And do we then find any such appearance as the common description would lead us to expect? Do we find successive layers of granulations, or any considerable thickening of newly formed substance? I have made many such examinations, and could never perceive any thing but a thin layer of organized matter covering the surface.

How then are wounds healed by granulation?

Lymph being effused over the surface and organized into a granular pellicle, lymph and serum are effused into the subjacent cellular tissue so as to distend it more or less. In what is called a healthy granulating ulcer, the quantity is very small, so as hardly to affect the elevation of the surface, or induration of subjacent parts, but when the process proceeds in a morbid manner, then many remarkable phenomena are thus induced.

For instance, when the ulcer is defective from weakness, the granular surface is distended by serum, effused under it, and elevated into soft spongy projections, the proud flesh of the vulgar. This œdematous state of the sore is usually accompanied by a similar condition of the limb or other part in which it is seated; no trace of these fungosities is to be found after death; pressure restrains them as effectually as it does the œdema of the limb; and they suddenly subside under the action of what are called escharotics without leaving any remains in the place they occupied. These observations afford satisfactory evidence of their real nature, which I had lately an opportunity of illus-

trating still more convincingly. William Brown entered the Hospital on the 27th of October to obtain relief for a most extensive and frightful sore of the leg. It had existed for seven years—it stretched from the middle of the calf, on the back and both sides of the limb, to the heel. There was great general swelling—enormous fungous growths—complete inability of motion—in short, such a formidable appearance as led the patient, and most of the medical men who saw him, to conclude that amputation afforded his only chance of remedy. A large blister was applied, and the state of matters soon suffered an extraordinary change for the better. The swelling of the leg subsided—the fungosities disappeared, and the sore, now greatly diminished in extent, assumed a healing appearance. At the end of two weeks from his admission, I desired him one morning to try if he could walk. When he had accomplished a few steps, I observed the blood trickling from the ulcerated surface; and, on observing it more closely, discovered a number of dark-coloured eminences which had not existed previously. They varied in size from that of a pea to that of a nut, and exactly resembled proud flesh—or fungosities of weak ulcers. When squeezed roughly they suddenly burst, and collapsed with effusion of blood. When pressed more gently, the pellicle forming them could be distinctly traced over the adjacent granulating surface, where a similar appearance was produced by the blood forced out of the little tumours formed in the first instance. It is difficult, I think, to conceive a more satisfactory proof of the opinion which has just been offered as to the nature of a granulating surface than this observation, which I am very much surprised should not have been made before.

In those sores, again, which have something specific in their action—something capable of contaminating other parts of the system, either by absorption or extension of action, there is an effusion of lymph into the subjacent and surrounding cellular substance, which occasions the indurated and elevated edge so characteristic of such sores.

In other ulcers, as those occurring in scirrhoue and medullary sarcomatose textures, lymph is effused under the granulating surface, and becoming organized, elevates it into fungous excrescences. And here I dare say it will be asked, if morbid structures be reproduced, why cannot the healthy tissues be regenerated? To which I answer by asking, Since the legs of salamanders and lobsters are reproduced after removal; why are not the limbs of man also reproduced? In studying the operations of nature we ought always to prefer facts to reasoning.

The granular surface being formed, so as to seal up the inter-

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stices of the body and serve as a temporary integument, the process of healing proceeds by levelling the sore with the surrounding skin. The slight effusion which, as already mentioned, obtains under the granulations, assists in this, but the effect is chiefly produced by absorption, consequent emaciation, and sinking of the surrounding tissues, especially the fat. So soon as the surface of the ulcer, or the edge of it at least, is on a level with the skin, the absorbing process goes on more rapidly, removing the interstitial particles of the granular pellicle and subjacent tissue, and thus diminishing the area of the sore. In illustration of this part of the process I may remark, what every attentive surgeon must have observed, that the cicatrix of ulcers is smallest in those parts of the body where the integuments are most lax, as the scrotum, the abdomen, the mamma, and that it is largest where the skin is most unyielding from its firm connection, as the thorax, the cranium, the shin, &c.

The cicatrix is formed of the granular pellicle and subjacent cellular substance, which has been indurated by the effusion of lymph into its cells. Its thickness varies with circumstances, but always diminishes after the cure seems to be completed; whence, though when first formed upon a level with the surrounding skin, it ultimately becomes lower, so as to constitute a depression; but this appearance is no doubt partly owing to the surrounding parts recovering from the emaciation, which, as above-mentioned, takes place in the first instance as a step towards the cure.

Though there is no reproduction by granulation generally speaking, there is one exception in the case of bone, which we every day see regenerated after exfoliation, compound fracture, &c. This also may be argued in favour of the common opinion, but may be answered as above, that analogy is no proof against facts. Why bone should be formed by granulation, and the other tissues should not, I cannot tell. Nature is the best judge of her own proceedings. And our business is to study their results, not the motives which led to them.

The length to which this paper has extended, renders me averse to detailing any of the particular cases treated by blisters in the Hospital, as I intended to do. Suffice it to say, that various people who had suffered for many years,—one man for twenty-five years, had been treated unsuccessfully in other hospitals, and were considered incurable,—speedily recovered under this treatment.

75, *George Street,*  
17th November 1829.

QUARTERLY REPORT  
OF  
THE EDINBURGH SURGICAL HOSPITAL,  
FROM NOVEMBER 1829 TO FEBRUARY 1830.

By JAMES SYME, Esq.

FELLOW OF THE ROYAL COLLEGE OF SURGEONS LONDON AND EDINBURGH, AND LECTURER ON SURGERY IN EDINBURGH.

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(*From the Edinburgh Medical and Surgical Journal, No. 103.*)

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WITHIN the last three months, viz. from the 8th of November to the 8th of February, 410 patients affected with surgical diseases have applied to the Hospital for relief. Of these 67 have been admitted into the house, and the remainder have been treated as out-patients. In next Report I will give a general statement for the whole year of the diseases which have been presented at the Institution. In the meantime I will notice what were most remarkable in a professional point of view ; and having in last Report confined myself to the subject of ulcers, I will now mention some of the more interesting cases that occurred during the period to which it referred, along with those of the quarter at present more particularly under consideration.

*Fracture of the Thigh.*—Of this accident there have been five cases, three of which were very similar to each other, the subjects being men in the vigour of life ; the fractures being at the lower third of the thigh ; there being much tendency to retraction ; and lastly, all of them being attended with a considerable dropsical effusion into the knee-joint.

The treatment consisted in the application of pasteboard

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splints, padded with tow, on each side of the limb, to prevent displacement from its weight and the spasmodic action of its muscles, and a long splint of wood extending from the false ribs beyond the foot, to effect extension.

The cure was complete in all of the cases, though somewhat delayed in one of them, owing to an accident which happened to the patient about a month after he entered the Hospital, when the bone appeared quite firm, and was so straight that my pupils could not discover any difference between it and its fellow. He unfortunately attempted to walk while no one able to afford him assistance was present. He grew sick, fainted, and in his fall fractured the bone a second time. The treatment was renewed, and at the end of two months from the date of admission he was dismissed perfectly cured. The fourth case of fractured femur occurred in Peter Yule, æt. 35, and was complicated with a stiff knee-joint, which prevented the limb from being straightened and extended in the usual way. The fracture, a few inches above the knee, was fortunately transverse, so as to admit of no retraction, and a cure not less satisfactory than that of the others was obtained through means of pasteboard splints, while the limb was laid in a bent position on its side.

The fifth case of fractured femur was that of Jasper Stevenson, æt. 72, farm-servant of Sir Alexander Maitland Gibson, who, owing to a fall from the top of a hay-stack, sustained a fracture of the neck of the bone. The limb was extended by means of the long splint, and matters seemed to be proceeding favourably for about a week, when symptoms of gangrene were observed on the sacrum and instep, which of course rendered it necessary to remove all restraint.

'The patient regained considerable strength of the limb.

In old people who have suffered this accident there is always danger of inducing mortification from employing the means most effectual for preserving the limb in proper position, viz. the long splint; but this does not seem to me a sufficient reason, as Sir A. Cooper and some other surgeons think, for abstaining from all attempts of the kind, and for leaving the affair entirely to nature. The most prudent practice seems to be, to give the patient a fair chance of recovery, by subjecting his limb to the proper apparatus, and if he should prove unable to bear it, then there can be no occasion for regret, either on his part or that of the practitioner. Last winter two of my apprentices, Messrs Wishart and Brown, succeeded in curing an old woman of 63, who had suffered a well-marked injury of the kind in question. She can walk well without assistance, and there

is no perceptible difference between the two limbs, except a very slight eversion of the toes.

*Fracture of the Humerus.*—Of this accident there were five cases, viz. one at the neck, three through the shaft, and one just above the condyles. The first occurred in an old woman who was knocked down, owing to her own inattention, by a gentleman riding quietly along the road. She obtained a speedy and perfect cure, without the slightest displacement, in somewhat less than three weeks, by means of a spica bandage, a cushion in the axilla, and a sling. The second case happened to a respectable tradesman, who fell from the height of twenty feet. He was treated out of bed with pasteboard splints, and in three weeks obtained a perfect cure. The third case was that of an old woman, owing to a fall in the street. It was treated in the same manner with equal success. The fourth case happened to a girl from falling on the ice, and was treated like the others. The fifth case occurred also in a little girl who was hurt by a log of wood. The fore-arm seemed to be shortened, and the olecranon was unusually prominent, so that at first sight the accident seemed to be dislocation backwards. A very slight extension, however, sufficed to ascertain the truth by removing the deformity so long as it was continued, and permitting it to return so soon as it was relaxed. A bandage with proper compresses retained the bones *in situ*, and the patient was dismissed cured in the course of the third week.

*Fracture of the Clavicle.*—There were three cases of this fracture, which recovered readily under the method of treatment described in my first report.

*Fracture of the Tibia.*—Of this usually reputed rare accident there were no fewer than five cases. Of these four happened from false steps, and sudden twists of the leg. The bone gave way about the lower third. There was little displacement, and little difficulty in the treatment, which consisted in applying pasteboard splints, and maintaining the limb in a bent position, which was laid on its outer side. The fifth case was caused by direct violence sustained from falling down a stair which gave way in a Leith brewery. The fracture was situated just below the tuberosity of the tibia, and hence it was necessary to place the limb in an extended position, to prevent the displacing effect of the extensors of the knee-joint, which is so troublesome in this particular case, when the knee is bent.

*Fracture of the Fibula.*—Of this fracture there were three cases, two in males, and one in a female. The treatment in all of them was the ingenious, simple, and effectual plan of Dupuytren, viz. the application of a long narrow wooden splint on the inner side of the leg, extending beyond the ankle and knee,

between which and the tibia a thick compress being interposed, while the knee and foot are drawn to the splint by means of a simple bandage, an effectual resistance is afforded to the displacing tendency of the weight of the limb and peroneal muscles.

*Fracture of the Radius.*—There was one of several cases of fractured arm which occurred that deserves mention, from having been overlooked for three weeks after the accident. The patient was Mrs Cassels, who came from Kilmarnock to obtain relief for an injury of the wrist, occasioned three weeks previously by a fall on the hand. There was no deformity of the limb; but a fracture of the radius very close to its carpal extremity was readily recognized by the crepitus. Splints were applied, and the patient had the satisfaction of sleeping soundly during the following night, which she declared the pain had prevented her from doing ever since the accident. What makes this case the more remarkable is the circumstance, that, after travelling sixty miles to obtain assistance, she failed in finding it at the institution to which she first applied, where the case was still treated as a strain.

*Compound Fracture of the Leg.*—The only case of compound fracture was that of George Mackay, porter, a most unpromising subject for recovery from such an accident. His appearance indicated a naturally full habit, with a broken down constitution; his pulse was irregular and intermitting; and he looked as if labouring under chronic disease of the chest. Notwithstanding these unfavourable circumstances, he did extremely well, and five weeks after the accident, the bones were firmly united and perfectly straight.

*Fractures of the Ribs, Metacarpus, &c.*—Of these there were various cases, but none deserving particular attention, excepting one where there was considerable emphysema, which yielded to bleeding, tartar emetic, and bandaging.

*Dislocation of the Humerus.*—Of this accident there were four cases, all in stout men, and in all the reduction was effected by manual extension, without the assistance of pulleys, which I regard on most occasions as equally unnecessary and inconvenient.

*Dislocation of the Thumb.*—There was one instance of this uncommon and troublesome dislocation, in the case of a woman who fell on the floor while playing with a child. The first phalanx of the thumb was dislocated backwards on the metacarpal bone. I fastened a silk handkerchief to the thumb by means of the clove-hitch, and then making one person extend, while another performed counter-extension by holding the hand, I pressed with all the force of both my own thumbs on the extremity of the dislocated phalanx. After one or two attempts I succeeded in effecting the reduction.

In the only other case of this accident I ever happened to see, the surgeon found it necessary to divide one of the lateral ligaments of the joint.

*Dislocation of the Jaw.*—There was one case of this dislocation in a woman who had previously suffered the same accident. Mr Smith reduced it in the usual way.

*Excision of the Elbow-Joint.*—Little more than a year ago, in November 1828, I cut out a carious elbow, for the first time the operation was ever performed in Great Britain. Since then I have operated in six cases. The profession, I am happy to say, seem to be satisfied with the weight of this evidence, and at least two operations of the kind have been lately performed by different practitioners in Edinburgh. Five of my cases have already been put upon record through the medium of this Journal, and I will now relate the other two.

Elizabeth Johnston, æt. 15, from Falkirk, entered the Hospital on the 26th of August, on account of a disease of the right elbow-joint, which had existed for six months, commenced spontaneously, and increased progressively, notwithstanding the efforts of her medical attendants. It now presented a most formidable appearance, the joint being so much swelled as to measure thirteen inches in circumference, and the arm above being reduced to little more than skin and bone, which made the enlargement seem even greater than it really was. The skin over the olecranon was extensively ulcerated, and at different places, both on the front and back parts of the joint, the probe could be passed into sinuses which extended to the bones. The limb was straight, and nearly immovable. The discharge was profuse, the pain unceasing, and the irritation so great that the patient's health seemed rapidly sinking. It was plainly necessary to do something effectual for her relief, and both Dr Ballingall and I, though entertaining the most favourable opinion of excision, from what we had seen of its good effects, resolved that any operation short of amputation would be inexpedient in this case, where there was such extensive disease not only of the bones, but also of the soft parts. Being, however, very averse in general to amputating the arm for caries, and feeling particular reluctance to mutilate this unfortunate girl, who was distinguished by the most amiable disposition and interesting appearance, I delayed the operation. In the course of ten days, whether it was owing to a real improvement proceeding from the free vent which had been afforded to the matter by incisions, or was merely the effect of familiarity with the appearance of the joint, I fancied that it was not so hopeless as at first believed, and resolved to make an attempt at excision.

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The operation was performed in the manner formerly described, and was attended with very little difficulty, owing to the separation of the surrounding soft parts from the articulating bones, which had been caused by collections of matter. The olecranon was greatly expanded, and, if I may use the expression, completely rotten, so that it crumbled into fragments, which were extracted piecemeal. The radius adhered to the humerus, and was extracted along with it. Before dressing the wound, I observed that the ulnar nerve was partially divided by an oblique incision, and therefore cut it completely across, to avoid the danger of such a wound ; and its extremities being then placed in contact, the integuments were stitched together. The patient did extremely well ; the wound healed most kindly ; the swelling of the joint subsided ; she gradually regained its use ; and is now, I am happy to understand, restored to perfect health.\* For some time after the operation, she complained of coldness and numbness in the ulnar side of the hand, but in process of time got rid of these unpleasant symptoms, probably in consequence of re-union between the extremities of the nerve.

James Page, æt. 8, was recommended to the Surgical Hospital by Mr Ferguson of Auchtermuchty, as a proper subject for excision of the elbow-joint, and was admitted on 2d January. The right elbow was much enlarged, discoloured, and stiff. There were two sinuses opening on each side of the triceps, through which a probe could be passed to the bone. The operation was performed on January 12, in the ordinary manner. The wound healed kindly, and the patient is nearly ready to leave the Hospital.

James Alexander, æt. 9, from Arbroath, entered the Hospital on the 2d February, on account of a disease of the elbow-joint, under which he had laboured eighteen months. The bone can be felt extensively diseased, and the case seems in all respects a favourable one for excision, which will be performed so soon as the parents are informed and give their consent.

James Dennet, came from Dundee to place himself under my care on account of pain, swelling, and redness over the olecranon, which had resulted from a blow on the elbow, received several months previously. On coming to town, he was persuaded to apply to another practitioner, who made a long incision through the skin. When he at length applied to me, a small part of the wound remained open over the olecranon, where there was some swelling and much tenderness on pressure. The patient declared that he was not any better than when he

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\* I was informed to-day that her father having lately died, leaving a widow and six children in very destitute circumstances, she is able to contribute towards their support by tambouring muslin.

left home. Finding that a probe could be passed to the bone and a little way into its substance, I concluded that a superficial caries of the olecranon was the cause of his distress, and, therefore, after exposing the bone, removed the softened portion with a gouge, on the 9th January. The wound is now nearly healed, and the patient makes no complaint.

*Excision of the Knee-joint.*—The knee-joint, so far as regards its structure, is an equally favourable subject for excision with the elbow, since there is only one articulation concerned in the disease or affected by the operation, and not a number, as is the case in the wrist or ankle. But the advantages from the operation in this situation are much more questionable than in the shoulder or elbow, since not only is there much less difference between the utility of a natural leg and a wooden one, than between that of a real and artificial arm, but doubts may even be entertained as to the probability of deriving any assistance in progressive motion from the limb, which is preserved by cutting out the knee-joint. With the exception of the two cases operated upon by Mr Park of Liverpool, nearly fifty years ago, and the two cases lately published by Mr Crampton of Dublin, I am not acquainted with any recorded facts to guide us in deciding this question. Each of these gentlemen lost one of their patients, but the others survived and retained limbs so useful, that the owners would not readily have exchanged them for artificial ones. Mr Park's patient, a sailor, was able to ascend the rigging of his ship with the agility peculiar to that profession; and the woman on whom Mr Crampton operated could walk the distance of eight or nine miles without suffering fatigue or inconvenience.

The advantages attending excision of the knee-joint over amputation in the thigh, in addition to the satisfaction of saving a limb, and promoting the credit of surgery, seem to me, *First*, The negative one of saving the patient from the inconvenience of resting his weight upon the *face* of a stump: *Secondly*, The positive one of preserving for him the tarsus, metatarsus, and toes, which constitute an apparatus much more efficient in protecting against the effects of concussion than any artificial one that can be constructed. Influenced by these considerations, I resolved to try the operation in some of those cases of diseased knee which so frequently result from white swelling in young subjects, and are condemned without any ceremony to amputation.

John Arnot, æt. 8, was admitted on 1st December. His left knee was very much enlarged and immovably bent at an acute angle with the thigh. There were two sinuses on the inner side of the joint, which allowed a probe to reach the bone. The

disease resulted from a fall on the ice, and was of three years duration. His health was broken, and he seemed devoted to speedy destruction, unless something was done for his relief.

On Monday, therefore, 7th December, I made two incisions across the fore part of the joint, extending from one condyle of the femur to the other, meeting at their extremities, and including the patella between them. The integuments thus insulated being removed, together with the patella, which was very much diseased, I exposed the extremity of the femur and sawed it off. In doing this the periosteum was separated from the bone, to which it adhered very slightly, for about an inch or rather more, and I therefore thought it right to saw off another portion to this extent. The head of the tibia was next exposed, and removed by means of cutting pliers. One of the articular arteries was tied, and we then proceeded to dress the wound ; but here an unexpected difficulty occurred, owing to the hamstring muscles, which, as already stated, were much contracted, and still prevented the limb from being straightened, notwithstanding the relaxation they had suffered in consequence of the removal of the joint. I extended the limb as far as was practicable, and secured it in this position by a splint and bandage. The patient had very little constitutional disturbance, but the wound presented a dry and unpromising appearance. The tibia, from not resting in opposition to the femur, was drawn up behind that bone, distended the integuments, and threatened to exfoliate extensively. I at length succeeded, by cautious extension and counter-extension, in reducing the displaced extremities of the bones, when the limb became quite straight, and the tendency to dislocation almost entirely ceased. The cure afterwards advanced satisfactorily, notwithstanding the most vexatious opposition on the part of the patient, who was a boy of uncommon quickness, but most perverse disposition.

Four weeks after the operation, the wound was all but healed, and the limb is now becoming every day more useful to the patient, who can already make considerable use of it in walking, though not yet provided with a high-heeled shoe.

Ann Mackintosh, æt. 7, entered the Hospital 14th December, on account of a white swelling of the right knee, which had existed eighteen months, and was now in its last stage. There was a large sinus above the inner condyle, through which I introduced my finger into the joint, and felt it extensively diseased. Encouraged by the success of the former case, I performed a similar operation in this one on the 28th December, and think it unnecessary to mention the particulars, as they were in all respects similar to those already detailed. The articulating portions of bone removed were, as in the boy,

extensively ulcerated and carious ; but the soft parts were much less swelled, and less altered by the gelatinous degeneration of scrofulous action than in him ; the result, therefore, was expected to be, if possible, still more satisfactory.

Great difficulty was experienced, from contraction of the hamstrings, in preventing dislocation of the bones, and the femur, so far as it was visible, presented a bare and dead-like surface, but the favourable termination of the first operation, notwithstanding appearances equally disagreeable, prevented me from abandoning my sanguine expectations of success in this instance also. On the 6th of January, in order to prevent displacement of the bones, which all our efforts hitherto had been unable to effect completely, I cut away about two inches of the femur with the cutting pliers, and then observed, to my extreme concern, that the bone was denuded beyond the farthest extent to which my finger could reach. Amputation now seemed to afford the only chance ; but, before having recourse to it, I resolved to wait a little, in the expectation of nature pointing out at what part of the limb the operation ought to be performed. On the morning of the 8th, I found her very weak ; she sunk rapidly ; and died at two the same day.

I do not think that the enemies of excision of the knee-joint can find anything upon this case, since it would appear from reasoning, and has been in great measure proved by experience, that excision of a joint is less dangerous than amputation of the limb ; and the only question that can be agitated in respect to the merits of the operation in this situation concerns the utility of the limb which is preserved.

*Exfoliation from the Pelvis.*—In a late number of the Edinburgh Medical and Surgical Journal, I have put on record four cases of sinuses in the neighbourhood of the pelvis, which had been regarded as incurable, but which speedily healed after the extraction of small exfoliations of bone. One of these patients had been ill for two, another for five, and a third for seven years. The case of James Ormiston, *aet. 17*, was another of this kind, and tends to support the opinion expressed in the paper referred to, that many of the usually reputed incurable sinuses in the hip and upper part of the thigh are owing to the cause just mentioned. About thirteen months previous to admission, he received a blow on the hip with a stick from one of his companions, which caused discoloration, but no great inconvenience at the time. The part continued a little painful for six months, when it began to swell and form an abscess, which went on increasing to the time of admission. It was accompanied with great pain and stiffness when he bent his body forwards. I made an opening rather behind the tro-

chanter major, for the matter, which was deeply seated. A large quantity of pus was evacuated with much relief; and a few days afterwards his dresser observed a piece of bone projecting at the orifice, which he removed. It was nearly an inch long. The boy now felt comparatively well, but the sinus continued to discharge; and there being considerable swelling, with pain and tension about the trochanter, I apprehended that more mischief was going on, and enlarged the opening, so as to admit my finger, which is the best instrument for exploring such passages. I then found that the trochanter was quite sound, and ascertained that the sinus ran deep between the muscles in the direction of the pelvis. The uneasy symptoms immediately disappeared, no doubt owing to the free drain which was afforded to the matter; and the boy was dismissed cured on the 21st of December.

*Exfoliation from the Ankle.*—John Rogers, æt. 9, Corstorphine, was admitted 4th January, on account of a disease of the ankle, which had been caused by a wound inflicted five months previously. The prong of a grape entered on the fore-part of the malleolus externus, and passing obliquely across the foot, under the flexor tendons of the ankle, made its exit over the navicular bone. The wound healed in a few days, but the pain did not subside. Two months afterwards the ankle began to swell, and an abscess formed over the inner side of the joint, which was opened a fortnight previous to his admission. I found a piece of bone presenting at the orifice, and extracted an exfoliation of considerable size, fully an inch long, and half an inch broad. A few days afterwards one or two small pieces of bone came away, but the ankle still continuing swelled, stiff, and painful, I introduced a probe, and felt the bone extensively diseased. As the larger exfoliation seemed to have formed a part of the navicular bone, and as the ankle-joint, properly speaking, did not seem to be engaged in the disease, I proposed to perform a partial amputation of the foot through the tarsus, as in the case of Anne Stewart, which is related in the first Report; but the friends were adverse to any operation, and removed the boy to the country.

*Fistula in Ano.*—James Miller, æt. 29, admitted on the 22d September, had suffered from fistula in ano for nine years, and had hitherto been prevented from seeking relief by an exaggerated idea of the pain and danger attending the necessary operation. I found two fistulas, one communicating with the gut, the other not. I laid them both open, and dismissed the patient cured on the 16th of October.

James Preston, a middle-aged man, had suffered for two years from the usual symptoms of fistula, which were attributed by

him to hemorrhoids. I found a fistulous opening into the gut, about an inch from the orifice, and laid it open. The patient was dismissed cured in a fortnight.

I cannot refrain from once more stating three important facts which concern the treatment of fistula in ano, 1<sup>st</sup>, That the internal opening is rarely more than an inch distant from the verge of the anus. 2<sup>dly</sup>, That the cure requires no more than a division of the parts between the internal and external openings. 3<sup>dly</sup>, That the interposition of any foreign substance between the edges of the wound after the first twenty-four hours is not only useless but injurious. I could mention in illustration, some most striking cases which have occurred in my private practice since the date of my last Report.

*Stricture of the Rectum, with fistula in ano opening into the vagina.*—Robina Wright, admitted January 7th, three years ago began to suffer from pain in going to stool, with frequent desire to do so, and copious slimy discharge. She was then a servant in town, and up to that time had enjoyed good health.

To obtain relief from the complaints just mentioned, she entered the Royal Infirmary, and, with the exception of one week, remained there ever since, (three years,) as a physician's patient.

She complained of excruciating pain on going to stool, with an almost incessant call to do so. There was a copious discharge of slimy matter from the rectum, but its solid contents were never passed of a larger size than that of a quill. To relieve her distress she had been in the custom of taking three or four grains of opium daily, with a proportional quantity of the same introduced into the rectum. I found on examination a stricture of the rectum three inches from the orifice, so tight that the point of my finger could not pass through it. There was also a wide fistulous canal leading from the rectum into the vagina, and opening just within the orifice of each. Taking into account the youth of the patient, and the absence of any induration or thickening of the coats of the gut, I readily consented to attempt her cure.

I began by removing the stricture, which yielded without any difficulty to the introduction of steel bougies every third or fourth day. I then laid the fistula open, and she is now nearly well, being altogether free from pain in going to stool, and having no particular frequency of desire to do so. The amount of relief experienced in this case can hardly be conceived by any one who had not an opportunity of seeing the patient. The agonizing pain she constantly endured was plainly depicted in her countenance, and the fetid matter incessantly escaping

through the fistula into the vagina, not only rendered her existence still more wretched, but made her an insufferable nuisance to others.

*Lithotomy.*—In the beginning of December Mr Moir asked me to see a boy, three years of age, who, ever since he was eight months old, had suffered the most excruciating distress in making water, which he nevertheless had almost incessant desire to do. His complaints had at first been attributed to the irritation of teething, then to that of worms; and about eight months previous to the time when I saw him he had been sounded for stone. The symptoms were now so strongly indicative of calculus in the bladder, that, though none had been detected on the former occasion, I thought it right to introduce a steel bougie, and very soon ascertained the presence of a stone. In performing the operation I encountered a difficulty which is frequently met with in young subjects, but rarely, I believe, to such an extent,—I mean a prolapsus of the gut. The intestine was almost constantly protruded; but when the child suffered from the irritation of making water, or the introduction of a staff, it descended so as to form a tumour not less than a goose's egg, which occupied all the space between the tuberosities of the ischium, and seemed to leave no room for performing the operation.

Finding it impossible to keep the intestine reduced, I held it as far as possible aside, and cut very carefully, so as to avoid any injury of it on the one hand, or of the pudic artery on the other. The difficulty was by no means so great as I anticipated, and I readily extracted, in the course of a minute or two, an oval calculus about the size of an almond with the shell. To prevent any risk from infiltration of urine, I introduced a caoutchouc tube. The boy never had a bad symptom, and made all his water through the urethra on the tenth day.

Angus Sinclair, æt. 77, presented himself at the Hospital 21st December, labouring under symptoms which led me immediately to sound him, when I readily discovered the presence of a stone. As the patient, though old, was not particularly weak, or otherwise unfavourably disposed for an operation, I performed it on the 23d. Having extracted one small stone, I was led to suspect the existence of others by its angular shape, and after some search detected five more; a tube being then placed in the wound, the patient was conveyed to bed. He seemed to suffer very little during the operation, which would have been completed in considerably less than a minute if it had not been for the number of stones.

The urine flowed freely from the tube, which was withdrawn two days after the operation; and the patient made no com-

plaint until the 26th, when he became somewhat feverish, and altered in his appearance. There was not the slightest tenderness in the hypogastric region ; and I flattered myself that the constitutional disturbance would subside as it generally does after great operations ; but the patient became weaker and weaker, and died the day following.

Andrew Irvine, æt. 14, was sent up to the Surgical Hospital, from Lerwick in Shetland, by Mr Cowie, on account of symptoms so strongly indicative of stone in the bladder, that, though none could be felt on repeated examination, he was still believed to labour under this disease. I introduced a small sound, and discovered a calculus ; and here I may take the liberty of remarking, that the instrument used for sounding is generally much too large, since, unless of a small size, it is grasped by the irritated parts surrounding the canal, so tightly, that it cannot traverse the bladder with freedom.

The boy stated that his complaints commenced when he was three years of age, and had continued ever since, though only occasionally so severe as to interfere seriously with his comfort. I performed the operation, and extracted a round shaped stone, about the size of a small walnut or large nutmeg, apparently composed of uric acid. The tube was introduced as usual. There was never the slightest tendency to any unpleasant symptoms. The urine resumed its natural course on the tenth day ; and, on the fourteenth, he was perfectly well, with the exception of a small superficial sore, which resulted from the displacement of the edges of the wound.

The operation for lithotomy, as now performed, is one of the simplest in surgery ; and the importance which is still attributed to it by the public, depends upon the recollection of the shocking and protracted tortures which attended the old method of operating with the gorget. The patient above-mentioned is the only one I ever lost from the operation ; and his death, I think, may be ascribed fully as much to old age as to the injury inflicted.

*Stricture of the Urethra, with Fistula in Perinæo.—* Robert Mitchell, æt. 48, cooper, applied on account of a fistulous opening close by the verge of the anus, through which most of his urine passed.

I found a stricture at the bulb of the urethra, and had nearly cured it by the introduction of steel bougies every third or fourth day, so that he hardly passed a drop of water by the fistulous opening, when he unfortunately caught cold, and suffered a complete retention of urine. In these circumstances, I admitted him into the Hospital on the 13th October, and dismissed him cured on the 9th November.

*Stricture of the Urethra.*—Andrew Monro, æt. 30, smith, applied to me on the 10th of December, labouring under a complete retention of urine owing to stricture, from which he had suffered for three years. He was admitted and cured of his complaint, which was situated at the bulb, by the means above-mentioned.

R. Clyde, æt. 28, sailor, applied for the cure of a stricture at the bulb, twelve months old. The cure proved a difficult one, but at length yielded so far to the usual measures, that a pretty large bougie could be passed. He then became an out-patient, and unfortunately was so well satisfied with the relief afforded by his imperfect cure, that he absented himself before it was completed. In all ranks of life, patients labouring under stricture of the urethra are apt to annoy their medical attendants in this way, since it is difficult to convince them, that unless the canal be dilated to its full size, the disease, though temporarily alleviated, will certainly return.

George Cockburn, æt. 31, applied on account of complete retention, owing to stricture, which had existed for five years. He made some objections to the introduction of a catheter, which he said was of no use, since attempts of the kind had been repeatedly tried, without success, by several most respectable surgeons in Newcastle, whence he had lately come to Edinburgh. Being thus prepared to meet with difficulty, I selected a very small silver catheter, and passed it at once into the bladder, to the patient's no small surprise and very great relief. I am now curing the stricture.

*Catarrh of the Bladder.*—Neil Ranken, æt. 32, from Lochaber, was admitted into the Hospital on 25th January, on the recommendation of Mr Smith of Badenoch. He complained of frequent, indeed almost incessant, desire to make water, with much pain in doing so. The urine was very turbid, and loaded with mucus, which adhered to the bottom of the urinal. He was easier in the horizontal posture than when erect and taking exercise. His countenance was anxious and expressive of severe and long-continued suffering. He stated that his complaints commenced without any obvious cause, and had existed for six months. The symptoms led me to suspect chronic inflammation of the mucous membrane of the bladder; but, to ascertain the truth more positively, I carefully examined the urethra, bladder, and prostate, in none of which any disease being detected, except a slight stricture near the neck of the glans, there remained no doubt as to the nature of the malady.

He has been taking small doses of copaiva, soda, and rhubarb, and occasionally using anodyne injections into the rectum, with marked good effect. I have no faith in the *vesicæ lotura*,

or any of the means recommended for the cure of this disease, except those already mentioned, with local bleeding, blistering, and attention to the general health.

*Diseased Prostate.*—Alexander M'Lauchlan, æt. 63, admitted on the 10th of November, was recommended to the Hospital by Mr Forrest of Stirling, on account of severe urinary complaints, which had distressed him for two years. He had frequent desire to make water, and suffered great pain in passing it. The genital organs exhibited the conformation which is termed hypospadias. In the proper situation of the orifice of the urethra there was an opening which led to a short and narrow cul-de-sac, while the urethra terminated completely behind the neck of the glans by an extremely small aperture, through which a catheter could not be passed without previous dilatation. The urine drawn off was extremely fetid. The malformation just described had existed since birth, and consequently could not account for his complaints, which, as already mentioned, were only of two years duration. The existence of a stone had been strongly suspected; but on a most careful examination I could not find one, and therefore directed my attention to the prostate, which, when examined by the rectum, was ascertained to be considerably enlarged. In these circumstances, the patient was advised to return home and use the means which tend to palliate the miserable disease under which he laboured.

It is worthy of notice that this man's wife had four children.

*Tumours of the Vagina.*—Catherine Scott, æt. 20, was admitted on the 22d September on account of two pendulous tumours about the size of a small egg, which grew from the internal labia. They had existed four months, and were attended with much excoriation and uneasiness.

The tumours were cut off next day by means of scissors; the hemorrhage was restrained by compresses of lint; and she was discharged cured on the 1st of January.

The tumours when examined appeared to be merely extensions of the mucous membrane, and consisted of loose cellular substance distended with serous fluid.

*Hematocele.*—John Dunn, æt. 28, was admitted on the 26th of October on account of what seemed to be a hydrocele of the right tunica vaginalis. The fluctuation was distinct. There was no pain on pressure except at the back part; and though no translucency could be discovered, there seemed little room for doubting as to the nature of the complaint, especially as the patient stated, that during the twelve months which had elapsed since the swelling commenced, it had been tapped repeatedly,

and found to contain a clear colourless fluid. On the last of these occasions, which was about three weeks previous to admission, the tumour regained its former size almost immediately after the operation, which was attended with very severe pain. Being dismissed from the Hospital where this happened, he now wished, if possible, to be radically cured of his complaint.

I introduced a trocar with the intention of drawing off the water and injecting the bag, but was surprised to see a dark chocolate-coloured fluid escape, instead of the serum, which had been expected, and that it did not exceed two or three ounces in quantity, while great part of the tumour, which had been nearly equal in size to a goose's egg, still remained. I now discovered, on careful examination, that the testicle was little enlarged; that the tunica vaginalis was very much thickened; and that the bulk of the swelling depended upon a soft mass which broke under the fingers like a coagulum of blood.

Concluding that the contents of the tunica vaginalis proceeded from blood effused into it, owing either to the wound formerly inflicted, or to a morbid action of its vessels, I saw no way of relieving the patient except performing the old operation of excision. I accordingly made a longitudinal incision about three inches long, evacuated a large quantity of coagulated blood, and, finding the membrane thickened fully to the extent of a quarter of an inch, very soft and dark coloured, I cut it all away, excepting where immediately investing the testicle. The cavity was loosely filled with caddis, but a pretty profuse hemorrhage having occurred in the course of an hour or two, I filled it very carefully with graduated compresses secured by means of a bandage.

A moderate degree of inflammation followed the operation. The caddis was taken out by degrees, and the diseased membrane that had been left, sloughed away, after which the cavity gradually contracted, and the patient, who had suffered hardly any constitutional disturbance, was dismissed cured on the 30th of November.

*Hydrocele.*—Of the cases of this disease which occurred, the two following seem to deserve particular notice.

William Paul, *aet. 60*, from Leith, was admitted on the 16th November, on account of a large hydrocele on the right side of the scrotum. It had existed about thirty years, had become more troublesome from its size twelve years ago, and within the last year had been tapped several times.

With the view of performing the radical cure, I introduced a trocar at the usual place, viz. on the anterior surface, about a third from the bottom of the swelling. Having drawn off a considerable quantity of fluid, I was surprised to find that near-

ly half the tumour still remained. The lower part had subsided so that the testicle could be felt all round, but the upper portion still existed as before. Having recognized fluctuation, and ascertained that there was no hernial protrusion through the external ring, I was satisfied that there must be two hydroceles, one of the tunica vaginalis, and another of the cord. Having injected the bag already evacuated, and allowed the port wine, diluted with an equal part of water, to remain four or five minutes, I punctured the other swelling, and having drawn off its contents, which were clear and colourless, I threw in some wine and water, which was retained but a very short time, as the history of similar cases tends to show that the disease is not so apt to return in the upper as in the lower swelling. The subsequent irritation was rather within proper bounds, but nevertheless proved sufficient for effecting a cure, so far as the hydrocele of the tunica vaginalis was concerned; and the patient was dismissed on the 14th of January, labouring only under the swelling of the cord. He returned a few days ago anxious to have it also cured; but as there was unfortunately no room in the house for his reception at the time, I was obliged to postpone the operation.

John Bryce, æt. 42, weaver, from Carnwath, was admitted on the 1st of February, on account of a moderately sized and distinctly marked hydrocele, which had existed for seven months.

As the patient seemed to be an irritable subject, I threw in but a small quantity of wine and water, and retained it for little more than a minute, remarking to the gentlemen present that they ought to be guided as to the time by the constitution and feelings of the patient, rather than by their watches.

On the day following the operation, the scrotum was very much swelled and red. Next day these symptoms were aggravated, and a slight bluish tinge was observed in the centre. On the third day the whole anterior surface of the swelling was black. I made a free incision through this part, and directed warm fomentations to be applied to the scrotum, and four grains of calomel with one of opium to be given twice during the day. Next day there was a line of demarcation between the sphaeculated and living parts. The patient had enjoyed some sleep, and felt in all respects much better. I directed the resinous ointment with turpentine to be applied on caddis, and covered with a poultice. The slough has now separated.

This case is interesting as an instance of the violent effects which proceed from slight causes of irritation in peculiar constitutions. As a contrast with it, I may mention that of a gentleman, in whom I unfortunately injected the cellular sub-

stance of the scrotum instead of the tunica vaginalis. I converted the puncture into an incision about an inch long, and squeezed out some of the wine, but much of it still remained, and I prepared for violent local and constitutional disturbance, when to my surprise every thing went on favourably, and the patient obtained a radical cure speedily and satisfactorily.

*Cancer of the Scrotum.*—William Armstrong, æt. 32, mason, admitted 27th January, on account of an ulcer, about the size of a shilling, at the bottom of the scrotum, which presented a very obstinate and malignant appearance. The edges were excavated, thick and hard ; the surface was smooth and discoloured ; the discharge thin and foetid ; and there was much surrounding induration, extending to, but apparently not implicating, the testicle. The ulcer followed a hard tubercle, which was first noticed four months ago. On the 28th, I excised the ulcer, together with the surrounding induration, and found it necessary, in order to eradicate the evil, to shave off a thin slice of the testicle. The patient suffered no disturbance either local or general, and is now well.

*Hernia.*—On Sunday the 27th of December, I was asked by Dr Alison to meet Dr Ballingall in consultation on the case of M. G., an unmarried female, æt. 40, who, since the preceding Friday, had laboured under a strangulated femoral hernia, which had resisted all the ordinary means of reduction. The tumour was very large for a femoral hernia, exceeding that of a full sized orange. It was of old standing, but had never before attained such a size. Dr Ballingall and I having satisfied ourselves that the reduction could not be accomplished without an operation, recommended its immediate performance. The patient having no objections, was conveyed to the Surgical Hospital, where I operated soon after her arrival in the presence of Drs Alison and Ballingall.

The sac contained several ounces of serous effusion, a web of thickened omentum, and a fold of the small intestine. Having relieved the stricture, which was extremely tight, by cutting towards the pubes, so as to divide the crescentic portion of the crural arch, I proceeded to reduce the intestine, which was effected with some difficulty, owing to the distended state of the abdomen, and the size of the protruded part. I then cut away the thickened omentum, and dressed the wound.

The patient felt comfortable after the operation, which was performed at 4 p. m. Her vomiting ceased, and she had an evacuation from her bowels after an injection. During the night inflammation came on ; and, notwithstanding bleeding, leeching, warm fomentations, &c. proved fatal on the succeed-

ing evening at five o'clock. At the dissection, when Drs Alison, Graham, and Ballingall were present, we found the ordinary appearances which result from acute peritoneal inflammation of short duration. The gut which had been strangulated was a portion of the ileum, just before its entrance into the colon ; its coats were much thickened and hardened ; it was very dark in colour, and still retained the form into which it had been compressed while subjected to the strangulation.

In accounting for the unfortunate termination of this, as it seemed very favourable case, considering the age of the patient, her extreme composure of mind, and the absence of any symptom indicating inflammation in the hernial or abdominal contents, I have nothing to suggest but the peculiarities which are observed in the susceptibility of different individuals for peritonæal inflammation, and the rapidity and severity of its course. I recollect of operating last summer on two cases of femoral hernia, within a week or two of each other, where the result was very different from what might have been anticipated from their respective circumstances. One of these was that of a lady, in whom the strangulation had not existed quite two days, and that with occasional remission of the symptoms. The intestine was little altered from its usual state, and the patient's age, constitution, &c. promised the most satisfactory result. Nevertheless, peritonæal inflammation succeeded, and, after having its first acute attack subdued, recurred again and again in the most obstinate and alarming chronic form, so that, unless for the vigilance and skill of Dr Abercrombie, I am convinced it would have proved fatal. The other was that of the mistress of a lodging-house in the New Town, who had laboured under a strangulated femoral hernia for more than a week. Upon opening the sac, I found a transparent gelatinous mass, through which the gut, covered with coagulated lymph, appeared, if I might use the expression, like a potted eel. The coats of the intestine felt hard and leathery ;—in short, all the circumstances seemed so unfavourable, that, on leaving the patient, Dr Abercrombie, who had been asked to see her at the same time with me, expressed his conviction that the result must necessarily be fatal, in which opinion I entirely agreed. Yet, strange to say, the operation was not followed by a single disagreeable symptom.

When speaking of femoral hernia, I may mention that I once operated for this complaint on a man. He was a soldier, a patient in the hospital at Leith Fort, under the care of Dr Mackintosh, and recovered perfectly ; indeed the wound, as has often happened with me in operations both for inguinal and femoral hernia, healed by the first intention.

*Amputation of the Thigh.*—In the beginning of December, I was asked to visit Margaret Syme, æt. 11, on account of a swelling of the left thigh. The swelling was situated just above the knee, on the inner side of the limb; it was of an oval figure, about four inches long, and conveyed so distinct a feeling of fluctuation that I did not hesitate to make an opening with the view of evacuating its contents. To my surprise nothing but blood escaped, when, thinking that it was possible the incision had not been deep enough, I introduced a probe, and passed it readily to the bone, which was bare and rough. The nature of the disease was now sufficiently evident, and I next inquired into its origin and progress. The patient, who was extremely thin, with that greenish yellow complexion which is so frequently associated with medullary-sarcomatous growths, had for several months complained of severe aching pain in the bone. About two months previous to the time I saw her, the swelling was first observed, and had gradually increased ever since. The patient suffered severe and incessant pain. She had lost her sleep and appetite, and was evidently hastening to her end. In these circumstances, I recommended amputation, as affording the only chance of recovery, and with this view she entered the Hospital on the 15th December.

On the 17th, I amputated the thigh by two lateral flaps, and observed nothing particular during the operation, excepting that the bone was much more dense than usual. For several days the case seemed to be doing well, as far as could be judged from the local appearances and the constitutional symptoms. The wound, however, did not unite by the first intention; it suppurated profusely, and an exfoliation from the femur began to be detached. About three weeks after the operation, the patient became affected with diarrhoea and other symptoms of hectic, which, notwithstanding all our care, continued to increase until they at last proved fatal on the 10th of January. The tumour when dissected exhibited a most beautiful specimen of medullary sarcoma, being composed of a bloody brain-like mass lying between the periosteum and bone.

Catharine Wallace, æt. 28, applied at the Hospital on the 10th of January, on account of a swelling of the wrist, which she attributed to a fall sustained five months previously. The tumour, which occupied both aspects of the limb, was soft and fluctuating. She blistered it repeatedly without any good effect, and I then, in the belief that it depended on a deep-seated collection of matter, made a free incision, from which there issued nothing but a little blood. The wound healed by the first intention, and the patient even fancied that

it had afforded her some relief, but the swelling still continues, and will soon, I fear, require amputation of the arm.

*Amputation of the Arm.*—Margaret Donaldson, æt. 65, was admitted on the 13th of November, for a disease of the elbow, which seemed to require amputation, both on account of the local distress occasioned by it, and the constitutional disturbance resulting from its presence. There were two sinuses opening on the inner side of the limb, which extended to the bone, and constantly poured out a copious discharge of matter. About three years ago I amputated the arm, between the wrist and the elbow, on account of a most extensive caries of the wrist, soon after which time her present complaint commenced and has continued ever since, with occasional exacerbations and remissions. She wished to have the arm removed; but I was prevented from performing the operation, for ten days after her admission, by repeated attacks of erysipelas and constitutional disturbance. At last, on the 23d November, I amputated the arm by double flap. She recovered perfectly without any remarkable occurrence, except occasional attacks of the erysipelatous affection, and was dismissed cured on the 19th of December.

Mr Samuel Cooper, in his *Surgical Dictionary*, has alleged, in objecting to my arguments in favour of the flap mode of amputation, that I was not aware of the fact that muscles, when not exercised, suffer a degeneration which deprives them more or less completely of the characters which distinguish the muscular tissue. I never supposed that the muscular parts of a stump would continue as full and plump as they were previous to the operation, but believed, that, though somewhat attenuated, yet being approximated to a tendinous consistence, they would still more effectually fortify the stump against external injury, than if they had remained in their original state. In examining the stump removed in this case, I was rather surprised to find the muscles which covered the extremities of the bones still presenting their natural characters.

*Amputation of the Leg.*—George Robertson, æt. 10, entered the Hospital on the 24th of September, on account of caries in the articulation of the astragalus and os calcis. As the disease, which had existed for eleven months, was seriously affecting the patient's health, I recommended amputation, and performed it at the middle of the leg by single flap on the 24th of November. The patient recovered without any trouble, and was dismissed cured on the 26th of December.

Mr G. applied to me on the 17th of December, on account of a disease in the foot, which had existed upwards of seven

years, for the last three or four of which he had been unable to use it in walking. The foot was swelled, stiff and painful about the tarsus and ankle-joint, and, when moved, occasioned an obscure crepitation. All sorts of remedies, such as leeches and blisters, iodine and mercurial ointments, with pressure, had been used without benefit, and the patient's patience was now so completely exhausted by suffering and confinement, that he was desirous of having the limb removed. Though I should by no means have felt inclined to recommend an operation in such circumstances, I felt unwilling to refuse compliance with the patient's desire, as there seemed little reason to expect any amendment in the leg. He was not reduced by disease, and was not suffering much irritation from it, but he was of a cold phlegmatic temperament, which made me less apprehensive of danger than I should otherwise have been in the same circumstances.

I amputated the leg mid-way between the knee and ankle by a single flap on the 21st of December. The patient was hot and restless after the operation, and next day became suddenly delirious, tossing about the stump, and insisting upon getting out of bed. I bled him to sixteen ounces, and prescribed a purgative injection, to be followed by repeated doses of laudanum and antimonial wine. He became quite composed in the evening, but passed a restless night. Next day he continued in the same state, with frequent cold shivering fits. He took senna, Epsom salts, and tartrate of antimony. Next day he was much better, and the wound continued as it had done all along, to present the most satisfactory appearance. On the fifth and sixth days he was not so well, being restless and frequently affected with shivering fits ; his ideas wandered ; his countenance had an unmeaning expression ; and the skin all over the body had acquired a yellowish tinge. On the seventh, all the symptoms which have been mentioned were considerably aggravated, and on the eighth day he died, with all the appearance of a person labouring under the most confirmed jaundice.

Every practitioner must have met with cases similar to the one just detailed ; and I am at a loss to suggest any means by which the fatal result could have been prevented, unless perhaps a longer and more careful preparation for the operation than was thought necessary, as already mentioned. In operating upon patients who have not been reduced by their diseases, or are not suffering much irritation from them, I have always been accustomed previously to lessen the strength of the system, and accustom the individual to confinement in bed. For instance, a short time before operating on the case under con-

sideration, I was asked to extirpate the testicle of a gentleman, who came from the country for that purpose. As he was remarkably stout, I advised him immediately to go to bed, and take a succession of smart purgatives and diaphoretics, which, in the course of a few days, reduced him to a favourable state for suffering the operation.

*Amputation of the Leg.*—Thomas Gibson, æt. 11, applied on the 26th of December, on account of a diseased foot, which was with some difficulty exposed to view, owing to the complicated investiture of the apparatus which has of late come into fashion for the treatment of diseased joints through the recommendation of Mr Scott. The bandages, plasters, ointments, &c. having been at last taken away, two sinuses made their appearance, into which I was about to introduce a probe, in order to ascertain the source of a purulent discharge, which seemed extremely profuse, when, holding the anterior part of the foot in one hand, and the heel in the other, I felt that the articulations in the middle of the tarsus were completely destroyed, so as to admit of motion in all directions. The disease had commenced sixteen months previously in consequence of a strain, and for the last eleven of these had been subjected to the system of pressure. As the boy's health was now much impaired, and the disease was most thoroughly hopeless, I recommended amputation; which, being readily agreed to by the parents, was performed rather below the middle of the leg by single flap on the 11th of January. The wound healed kindly; and the patient was dismissed cured on the 1st of February. It is much to be regretted that the excellent practice recommended by Mr Scott has become the cause of great and frequent mischief owing to its misapplication.

*Amputation of the Great Toe.*—William Bell, æt. 26, from Moffat, recommended by Mr Walker, was admitted into the Surgical Hospital on the 7th of October, on account of a diseased great toe, which had rendered him lame for two years. There were several openings over the joint, through which both phalanges could be felt very much diseased. And I had therefore no hesitation in amputating the toe at the metacarpal articulation. The wound healed kindly; and the patient was dismissed cured on the 24th of October.

*Amputation of the Fingers.*—Four fingers were amputated on account chiefly of whitlow.

*Gun-shot wound of the Hand.*—Walter Frazer, æt. 27, private of the 9th Lancers, being on a visit to his friends in the neighbourhood of Trinity, while shooting sea birds, happened to fall in passing through some brushwood, and in raising himself unfortunately placed the right thumb over the muzzle of his piece,

at the same time that its contents were discharged by some of the twigs pulling the trigger. The distal phalanx was blown off quite smooth, with the exception of a small piece of the bone which was shattered into the joint. At first sight I thought of amputating the contused surface, but abandoned this intention at the suggestion of my friend, Dr Ballingall, who remarked, that his fitness for military duty would be very much affected by any farther diminution of the thumb. I therefore merely removed the broken fragments of the bone. For nearly a week the patient came daily to the Hospital from his father's house, about four miles off, to have the wound dressed, but he then began to complain of great pain in the wound, with diffuse inflammation of the fore-arm, and violent disturbance in the system. I took him into the Hospital on the 15th of January, and next day made an incision near the wrist, on the palmar side, through which a large quantity of matter was evacuated. A succession of abscesses formed in different parts of the hand, and the patient, through pain, want of sleep, diarrhoea, and profuse perspiration, became extremely reduced. His general health is now nearly restored, but the hand still continues oedematous and painful.

*Extirpation of the Mamma.*—Mrs Williamson, æt. 30, from Aberdeen, was admitted on the 24th of November, with well-marked scirrhus in the right mamma of seven years standing. The skin adhered in two parts to the diseased gland, and in the axilla several hard knots were perceptible. But notwithstanding these unfavourable circumstances, the youth and apparent good health of the patient induced me to comply with the almost unanimous recommendation of her former medical attendants, and I removed the breast with the indurated glands in the axilla on the 26th of November.

A very large triangular portion of integuments having been removed, it was impossible to bring the edges so closely into contact as to prevent a space the size of half-a-crown from remaining uncovered. With this exception, the whole of the large wound healed by the first intention, and the patient was dismissed cured on the 23d of December.

*Omalgia.*—Christian Mathison, æt. 30, was admitted on the 12th of January, on account of a severe pain originating in the shoulder, but affecting the elbow and fingers so severely as to prevent her from sleeping, and totally unfit her for any employment. She had used leeching and blistering, and tartar emetic ointment without any benefit, and the complaint, which had existed for five weeks, was becoming every day worse and worse. I proposed the actual cautery, and, meeting with no objections,

applied it next day over the posterior part of the joint. The patient almost immediately experienced relief, and in the course of a few days was completely well, with the exception of the ulcer which resulted from the burn.

*Partial Paralysis of the Fore-Arm.*—There were four cases very similar to each other of palsy of the extensors of the hand. The patients could not straighten any of the joints from the wrist downwards, nor supinate the hand, but in other respects retained its use. They were all cured by repeated blistering over the extensor muscles, in a period varying from one to three weeks.

*Tumour of the Face.*—Mary Grieve, æt. 50, from the neighbourhood of Dunbar, was admitted 14th of August, on account of a tumour about the size of a walnut, seated at the inner angle of the eye. It was ulcerated on the surface, and had a soft consistence. I excised it on the 15th of August without any difficulty, and the wound, which was of considerable size, owing to the broad basis of the swelling, speedily contracted, so that she was dismissed cured on the 5th of September.

The tumour when divided presented all the characters of medullary sarcoma.

It is an interesting fact in this woman's case, that her breast was cut out eighteen years ago by Mr John Bell on account of scirrhus.

*Tumour on a Child's Head.*—On the 20th December, Mr George White asked me to see a male child, six months old, apparently in good general health. On the back part of the head, on the left side, behind the ear, there was a round, flat tumour, about two and a-half inches in diameter. It had somewhat of the consistence of a fatty tumour, but adhered to the bone. The mother observed the tumour soon after birth, since when it had been constantly increasing, and was now doing so more rapidly. She had showed it to several practitioners in town, who declined interfering, alleging that the child was too young to bear an operation, or that the tumour could not be removed. Having examined the swelling very carefully, and satisfied myself that there was no pulsation, I recommended an immediate operation, since there could be little doubt, that, if the tumour continued to increase at the rate it was then doing, extirpation would soon be impracticable. Dr Ballingall and Mr White being of the same opinion, the operation was performed, and no difficulty occurred except a pretty firm adhesion of fully half an inch in extent to the bone, which was at this part extremely thin, so as to yield readily upon slight pressure. It was in the centre of this space that the principal nutrient

artery of the tumour issued from the bone. I applied a ligature here, and then dressed the wound with compresses of lint and a bandage. During the succeeding night considerable hemorrhage occurred owing to the shifting of the bandage, and was arrested by its more careful application. The child did well afterwards, and the wound healed. The tumour, when cut across, exhibited a very perfect and beautiful specimen of the cystic sarcomatous structure, consisting of numerous independent cells, which were filled with thin fluid of various colour, from light yellow to dark red.

*Excision of the Tonsils.*—Catharine Cunningham, æt. 24, a servant in town, was admitted on 26th August on account of sore throat and deafness. On examination I discovered a very large swelling of the tonsils, which sufficiently accounted for both her complaints. I cut away the projecting portion on both sides by means of a hook and scissors, immediately after which she recovered her hearing, and ceased to be troubled with the uneasy symptoms in her throat.

Chronic enlargement of the tonsil is a very common disease in cold moist countries such as this, and the inconvenience which proceeds from it is no less complicated than distressing. The faculties of speech, smelling, tasting, and hearing, are all more or less affected, besides the constant uneasiness which is caused by the presence of a hard swelling in the throat, and the frequently recurring annoyance of inflammation in the morbid growth. It is therefore a fortunate circumstance that surgery affords a ready and certain mode of relief, viz. excision of the tumour. In doing this it is not necessary to remove the whole of the swelling, since the new actions, which are induced by the abstraction of a part of it, generally suffice for curing the remainder. The operation, therefore, is perfectly safe and easy ; indeed, even granting that it were necessary to remove the whole of the tumour, the operation would still be attended with hardly any danger, since the carotid artery, which is the grand source of apprehension, runs parallel with the direction in which the incision ought to be made.

There was another patient affected with this complaint admitted into the Hospital to-day, whose case will be detailed hereafter.

*Polypus Nasi.*—The soft mucous or benign polypus, as it has been variously named, usually grows from the upper part of the nasal cavity, never, so far as I know, from the septum, and but rarely from the inferior spongy bones. When it occupies this last situation, the method of evulsion, which usually answers so well, cannot be practised with advantage, owing to

the broad attachments of the swelling; and the best method of proceeding is to introduce a pair of scissors along the margin of the bone, and either completely detach the tumour, or, at all events, so weaken its connections, as to render extraction with the forceps a matter of no difficulty. The largest polypus of this sort I ever extracted was from a lady upwards of eighty. I have met with it much more frequently in children than in adults.

Helen Mackinnon, æt. 7, applied at the Hospital, August 28th, on account of a difficulty of breathing through the nostrils, which she had experienced since infancy, but which had become much more distressing within the last eighteen months, when a fleshy excrescence was perceived obstructing them. On examination, I discovered a mucous polypus in each nostril, growing from the inferior spongy bone, and easily removed them by first cutting the principal part of their connections with scissors, and then completing their extraction with forceps.

*Brachial Aneurism.*—William Gillon, æt. 20, was admitted on the 4th of February, on account of a pulsating tumour, the size of an egg, at the bend of the right arm, which had resulted from a venesection performed about a month previously. The following statement of the gentleman in whose hands this unfortunate accident occurred affords the best history of the case:—

“On the 11th January 1830, William Gillon complained of pain in the umbilical region, increased on pressure. He had diarrhoea, foul tongue, quick and full pulse. The median-basilic vein was opened while the patient sat upon a chair. The blood flowed steadily in a small stream, and had a dark colour. A thrombus formed, and before six ounces of blood had flowed the patient fainted. The arm was then bound up. A little castor-oil was given; and after its operation the patient felt almost quite well.

“On the 16th January, the arm in which the vein had been opened was found considerably swelled and ecchymosed, from the neighbourhood of the lancet-wound upwards, as far as the belly of the biceps muscle. The patient said he felt pain only over the superior part of the tendon of the biceps. In the course of three or four days, during which warm applications and frictions with camphor liniment were used, the swelling and ecchymosis disappeared, and the pain over the biceps subsided. On the 25th January, (fourteen days after venesection had been performed) the patient complained of a little pain at the bend of the arm. Upon examination, there was found,

just under the cicatrix of the lancet-wound, a pulsating tumour of the size and form of a filbert. When the humeral artery was compressed, the pulsations in the tumour were arrested for a short time, but they always returned again, even when the same degree of pressure on the vessel was continued. Compression over the aneurism itself was therefore the only curative means employed. At first this promised to be successful, as the tumour diminished somewhat, but it afterwards increased again to its present size."

I am quite at a loss to account for the long period which intervened between the infliction of the wound which gave rise to this aneurism and its first appearance, and I am still more at a loss to account for the accident occurring in the hands of a gentleman who is one of the most cautious and well-informed practitioners with whom I have the pleasure of being acquainted. The fact of its having done so, ought to put every one on his guard in opening the median basilic, and make us charitable in judging those who happen to wound an artery.

I tied the humeral artery a few inches above the elbow on Friday the 5th of February. The arm immediately became numb, and the pulsations of its arteries ceased until the evening, when they returned both at the wrist and in the tumour. Since the operation he has not complained of any pain in the aneurism, which has become much smaller, less prominent, and much more feeble in its pulsation. I trust that this favourable change will continue and increase until a cure is obtained, but will state the result in next Report.

*Attempted Suicide.*—There were two patients admitted on account of attempts at self-destruction,—one a young woman, who swallowed two pennies worth of acetate of lead, the other a female advanced in life, who cut her throat. They both recovered.

10th February 1830.

QUARTERLY REPORT  
OF  
THE EDINBURGH SURGICAL HOSPITAL,  
FROM MARCH TO JUNE 1830.

BY JAMES SYME, Esq.

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(*From the Edinburgh Medical and Surgical Journal, No. 104.*)

**B**RACHIAL Aneurism.—In last Report I related the case of William Gillon, in whom the humeral artery was tied on the 5th of February on account of aneurism at the bend of the arm, arising from an injury received in venesection. At that date, (10th February,) the operation promised to be successful, since, though the numbness, and want of pulsation in the aneurism as well as all the arteries of the limb below the ligature did not continue longer than a few hours, the tumour remained free from pain, softer, and smaller. The swelling soon afterwards began to increase; but, as the pulsation became more obscure, we still hoped that a cure would be obtained without any farther operation; and, in order to promote coagulation, the patient had his arm carefully bandaged, was kept quiet in bed, and used a slender diet. At the end of five weeks, however, finding that there was no progress towards improvement, and regretting the long confinement to which there seemed no prospect of a termination, I began to think seriously of performing

the radical cure by the old method, and this resolution was suddenly confirmed by an occurrence which took place on the 12th of March. In the site of the lancet wound there had all along been an ulceration about the size of a sixpence, which resisted the means employed to cure it, and sometimes manifested a disposition to slough. During the night of the 11th there was a considerable discharge of bloody serum from this part, and on the following morning, when the bandage was taken off, the bleeding threatened to increase. In these circumstances there could be no doubt as to the impropriety of farther delay, and I therefore laid open the tumour through its whole extent by an incision in the direction of the biceps muscle. A firm hollow fibrous coagulum lining the aneurism and preserving its shape being then removed, a gush of arterial blood flowed from the bottom of the wound. Being unable to control this bleeding by pressing above the aneurism, I pressed the points of both my thumbs down upon the vessel at the part where it had been injured, and then gradually separating them from each other was enabled to discover the wound, which was about a quarter of an inch long, gaping, with thick white lips. My assistant having substituted his thumb for one of mine, I attempted to detach the vessel from its connections; but finding this impossible, owing to the consolidation of all the surrounding tissues, which rendered the coats of the artery quite undistinguishable, I simply passed the needle round it above and below the aperture, so as to convey two ligatures, which being tied, effectually restrained the bleeding. No unfavourable symptom ensued; the ligatures separated on the ninth day; and the patient was dismissed on the 24th.

I have been particular in detailing this case, because I think it ought to have considerable weight in inducing surgeons to abandon the modern operation for aneurism at the bend of the arm. The ligature of the artery above the disease is here particularly difficult, while it may be practised at the seat of the injury without the difficulties that attend such a proceeding in other situations, unless indeed the former method has been tried and failed, when, as in Gillon's case, the want of command over the hemorrhage during the operation, and the condensation of parts occasioned by the longer continuance of the disease, render its performance far from easy.

*Aneurism by Anastomosis.*—Mrs M., recommended to my care by Dr Spence of Cupar, brought her child, which was 8 months old, to the Hospital as a private patient, on account of a naevus on its cheek. The tumour was situated near the angle of the mouth, and was about the size of a hazel-nut, livid, project-

ing, circumscribed, and nearly circular. At the time of birth it was so small as to be hardly perceptible, but had gradually increased, and was still increasing.

As the tumour did not seem to be confined to the surface of the cutis, excision appeared to be the best mode of removing it, and was accordingly performed by means of a cataract extracting knife,—a very convenient instrument for such delicate operations. The wound healed by the first intention, but opened out again in part, owing to an attack of inflammation caused, or at all events aggravated, by the tenseness of the cheek, and the additional stretching that proceeded from the child's crying. The ulcer was dressed with the acetate of lead lotion, and contracted so much, both in extent and depth, that there could be little, if any, permanent trace of it left.

In the early part of last winter I operated in a similar manner on a disease of the same sort in an infant of the same age, whose case excited a good deal of attention and difference of opinion. The tumour was of the same shape, size, and colour as the one last-mentioned, but was situated near the external angle of the eye. It had increased progressively from the time of birth, when it could hardly be perceived, and was still growing. The risk of hemorrhage and convulsions was urged against any operation, while the great and increasing deformity rendered the parents anxious for some remedy. Drs Abercromby and Davidson were in favour of excision, and I entirely agreed with them as to the propriety of this measure, which was executed with complete success. The diseased structure extended so deeply, that after the bulk of the swelling had been taken away it was necessary to dissect out the remainder with forceps and curved scissors. The wound healed by the first intention, and left no mark whatever.

When the tumour is quite superficial, the best mode of destroying it is to induce ulceration and scabbing. This process frequently occurs spontaneously; and I have remarked, that when the disease exists in several different parts of the same person, if one begins to ulcerate the others soon follow. The same salutary process may be induced by any local irritation, which is sufficient to cause a slight degree of inflammation. The introduction of vaccine matter has been recommended for this purpose, but seems to be objectionable, in respect to natural prejudice, particularly as so many other means of irritation answer equally well. A child was brought to me a few weeks ago, on account of a superficial nævus on the right side of the nose, opposite the angle of the eye; it had increased from the time of birth, and was increasing. I passed a common needle and

thread through the disease in its longest direction, and tied the thread so as to prevent it from escaping. No irritation followed immediately, but in a few days the nævus became less vascular, somewhat shrunk, and covered in the centre with a scab. If the process thus commenced does not complete a cure, I shall increase the irritation by applying one or more ligatures.

*Fungous Tumour of Mamma.*—“Jean Hey, æt. 37, admitted 19th February, on account of a large fungous tumour growing from the upper part of the mamma, not involving the nipple or skin below it, and not seeming to adhere to the subjacent parts. It is of an irregular shape, of a dark-red colour, of a soft consistence, and bleeds freely when touched; the discharge from it is thin, dark-coloured, foetid, and very copious. The patient is extremely emaciated, her countenance is anxious, and her complexion of a remarkable unhealthy looking yellow hue. She has little appetite, and what food she does take is generally rejected by the stomach. She has frequent fits of sickness, which she ascribes to the smell from her breast; she complains much of pain, and passes restless nights. Pulse quick and weak.

“Last May she had an infant seven months old at the breast, and was much confined to the house. She caught cold one day from going out, and was attacked with erysipelas in the face, which went off the following morning. She continued to be sick and squeamish occasionally for six weeks, her appetite being bad, and her thirst great, when she felt a small hard lump just under the nipple of her left breast. It increased in size, the child still continuing to suck, and formed a large elastic swelling, discoloured on the surface, and very painful. After poulticing it for some time, she applied to a surgeon, who made an incision, and evacuated twenty ounces of a dark-coloured foetid fluid, and on two other occasions, within the following ten days, discharged two tea-cupfuls of the same sort of matter. Poultices were again applied, but the pain and discharge continued, and an abscess formed, which being opened in January last, was found to contain six ounces of thick foetid pus. The opening did not close, but the skin, as she described it, began to fall off in small pieces round the wound, while fungous masses at the same time protruded.

“23d. Mr Syme being willing to afford the patient the only chance she had of recovery, proceeded to excise her breast. He included the tumour along with the nipple, within two semilunar incisions; it adhered slightly to the pectoral muscle, and after dissecting it off, he discovered a small round tumour lying under the muscle, which he likewise removed. The edges of the wound

were brought together with some difficulty, owing to the large quantity of skin removed, and retained by means of stitches. She was ordered beef-tea and wine in small and repeated doses. The diseased part being cut through after the operation, exhibited a very characteristic specimen of medullary sarcoma.

" 24th. Has passed a very restless night, having had profuse diarrhoea. She was ordered half-grain opium pills, to be taken according to circumstances; the stitches to be supported by broad pieces of plaster; beef-tea and wine continued. 25th. The diarrhoea ceased after the first pill. She is looking a good deal better; sickness less; pulse stronger; countenance not so anxious.

" March 2d. She is improving rapidly. Her appetite is now pretty good; pulse stronger; wound looking healthy. To have porter.

" 15th. Wound almost completely healed; desires to go home to attend to her family."

I have given this case at full length from the journals of the Hospital, both because the history of it is rather unusual; and because it shows the possibility of complete temporary recovery by operation from apparently the most hopeless cases of this disease. When I was asked to see this poor woman, she was in the most wretched state it is possible to conceive; the air of the room was poisoned with the stench that proceeded from a discharge so copious as to drench her clothes and the bed on which she lay; her stomach rejected food; and her pulse could hardly be felt. The second time I visited her, I found her busy in the performance of domestic duties, strong and active, while the breast was perfectly healed, and apparently free from any disposition to give her farther trouble.\* It has long seemed to me that we are in the custom of comprehending under the title of medullary sarcoma, many morbid growths of very different morbid tendency. Some of these tumours never fungate, though allowed to attain a great size; many of them fungate, but never bleed; others manifest the most remarkable hemorrhagic disposition; and there is the greatest variety with respect to their recurrence after removal. Such being the case, it would seem to be our duty, so long as we have not ascertained the distinctive characters, if there be any, of those of a malignant nature, to afford the patient a chance, by performing the operation whenever the whole existing disease can be taken away.

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\* Since this was written, I have learned that her health is again breaking up.

## 6 *Quarterly Report of the Edinburgh Surgical Hospital.*

*Fungus Hæmatodes of Foot.*—Catherine Mean, æt. 46, was admitted 19th April 1830, on account of a large tumour of the foot. It was fully the size of a child's head, was seated on the upper or dorsal aspect, and occupied all the space between the toes and ankle. It had a firm consistence, and was covered with smooth red integument, except at its apex, where several fungous excrescences protruded. The lower part of the leg was somewhat oedematous and inflamed, and she complained of constant pain in the tumour, increased on pressure. She had an unhealthy greenish-yellow complexion, slept ill at night, and showed the other usual indications of disordered health.

Nine years ago she observed a swelling about the size of a pea over the instep. She sometimes felt shooting pains in it, but did not suffer any constant uneasiness until two years ago, when it had gradually attained the size of an egg. Its progress then became more rapid ; it inflamed on the surface ; so that last February she was induced to apply to a dispensary, where she was advised to use poultices. In the course of a week after, it opened and discharged a large quantity of blood ; the fungous growths protruding from the opening. Since then, it has increased rapidly in size, and has of late bled four or five times, about a cupful at once.

I amputated the leg on the 22d, mid-way between the knee and ankle by the flap operation, and the wound healed completely by the first intention, to the surprise of some gentlemen attending the Hospital, who had seen much practice, but never witnessed such an occurrence, (*vide* a paper on the Treatment of Incised Wounds, in this Journal, Vol. xxiv. 52.)

*Medullary Sarcoma of Face.*—John Mackay, a middle aged man, applied on the 16th of March, on account of a firm circumscribed tumour, the size and shape of the half of a small walnut, which was seated at the inner angle of the eye. It had existed for twelve months, and was immovably attached to the bones below. As it appeared to me that there could be no doubt that this tumour sprung from the bone, I declined interfering with it. I have been told that an operation was performed afterwards by another surgeon in town, and that the disease was found to descend into the cells of the ethmoid bone.

*Tumours of Head and Neck.*—David Christison, æt. 31, applied on account of several small encysted tumours of the scalp, and a pretty large one at the angle of the jaw. In removing the former, I followed the practice recommended by Mr Copland Hutchinson, of simply running a knife through the swelling in its long direction, and then pulling out the cyst

with a pair of forceps, which not only saves much pain to the patient and trouble to the surgeon, but also lessens the risk of erysipelas that so frequently follows the removal of such tumours by a tedious dissection. The tumour of the neck consisted of a thin cyst containing steatomatous matter, and of course required a careful dissection,—indeed, it is very seldom that the cyst can be pulled out except in the scalp. I succeeded lately in thus extracting a small tumour of this kind from the face of a gentleman, and another from a child; but these must be regarded as exceptions to the general rule.

*Tumour of Lip.*—Robert Gardner, æt. 35, applied on the 15th of October, on account of a tumour in the upper lip. I punctured it to ascertain the nature of its contents, and, finding that they presented a purulent appearance, concluded that it was merely an abscess, which would require no farther treatment. In April, however, he returned with the swelling as large as before, I, therefore, dissected out the tumour from the inner side, and on cutting it through found it to consist of a thick pulpy cyst, containing a glairy yellow fluid.

*Bronchocele.*—Two cases of bronchocele lately presented themselves of very similar appearance, but very different nature. One of these was that of Margaret Welsh, æt. 60, recommended by Dr Johnston of Kirkcaldy. She had laboured under the disease for forty years. It had become very distressing, not by interfering with respiration or deglutition, but by impeding the venous circulation of the head, so as to render it necessary for her to be occasionally cupped or leeched on the neck. She has been using an ointment containing the hydriodate of potass, and *Ungt. Hydrarg. Camphorat.*, with much advantage, as has been ascertained by measurement, comparison with a cast, and her own observations. The other case was that of Janet Johnston, æt. 58, from Orkney, who had laboured under the disease for ten years. The tumour here was evidently composed of large cysts, the fluid or semifluid contents of which could be felt distinctly fluctuating. She stated that an opening had once taken place at the centre of the swelling, from which a great discharge escaped, and there was still a long cicatrix, with subjacent induration to be perceived at this part. As it did not appear that this case admitted of any relief, the patient was advised to take the first opportunity of returning home.

*Ganglion.*—Marion Ross, æt. 23, applied on the 4th of March on account of a large ganglion attached to the ligament of the patella, the size of an orange, which interfered with her walking and other duties as a servant. Being averse to perform, without trial of milder measures, the radical operations of

seton, incision, or excision, I simply evacuated the tumour by a small puncture, and applied pressure for a few days, when, finding that the swelling was returning, I applied a blister and then a plaster of camphorated mercurial ointment with iodine ointment. Under this treatment the swelling speedily subsided, and she was dismissed cured on the 17th of March.

Marion Colville, æt. 26, recommended by Dr Pagan, applied with a similar disease, though not nearly to the same extent. I did not think it necessary to puncture, but merely blistered and applied the ointment above-mentioned with the same success.

Johanna Fairley, æt. 39, from Kirkcaldy, applied on the 22d of April on account of a large tuberculated ganglion about the size of a pigeon's egg, which was seated on the back of the hand near the wrist, over the extensor tendons of the fore-finger. She had laboured under this disease for five years, and had it evacuated, &c. but was at length suffering so much, that she had made up her mind to be radically cured. I dissected out the tumour, which was composed of a very thin cyst containing the usual glairy substance, and adhering so intimately to the tendons above-mentioned, that it was necessary to insulate them completely for a considerable part of their course. The patient had frequent rigors, with considerable constitutional disturbance, with slight erysipelas of the affected hand, but recovered very well under the use of the tartrate of antimony and acetate of lead poultices.

*Ulcers.*—It will be seen from the list of cases, that a very great number have been treated at the Hospital. In a former Report, I entered very fully into the consideration of those which are usually styled callous or indolent, and which constitute a very large proportion of the ulcers that are met with in the lower orders. Some have attempted to depreciate the new treatment by blisters which I have proposed for this sort of ulcer, not on the ground of its inefficiency, but because it will not prevent a recurrence of the disease. I know very well that there is often a strong disposition to ulceration of the legs in certain constitutions, and at certain periods of life. I believe that proper precautions, local and general, may frequently prevent this disposition from causing a relapse, but this is more a subject of physic than surgery; and the question that concerns us is, what means are most effectual and speedy for promoting the healing of indolent ulcers? When there is much swelling of the limb,—when the edges of the ulcer are deep and callous,—and when the constitution of the patient is not particularly irritable, the effect of a blister is quite astonishing. In three days

or sometimes less, the surface of the ulcer is much diminished in extent, and on a level with the surrounding skin. Cicatrization then commences, and rapidly extends and completes the cure much more quickly than I have ever seen it accomplished even by the most careful execution of Mr Baynton's method, which of all the others which have hitherto been recommended is certainly the most efficacious.

There have been several cases of a sort of ulceration which presents very distinct characters, and yields readily to a particular mode of treatment. The ulcers I allude to are usually numerous, existing on the instep and lower part of the leg, and also on the back of the hand and arm. They are very superficial, of a circular or crescentic form, and of a grayish or yellow colour, with abrupt edges. They are sometimes painful, sometimes not. These ulcers are very obstinate, unless subjected to the black wash, under which they heal very speedily. I usually give a small quantity of mercury internally, either the blue pill or the oxymuriate, along with sulphate of magnesia. It is worthy of notice, that the mode of cicatrization constitutes one of the most characteristic features in this kind of ulcer. The cicatrix does not extend equally round the circumference, but beginning at one part, the concave part if the ulcer be crescentic, it shoots inwards towards the centre, and then spreads outwards to the remaining circumference.

*Ulcer of Great Toe.*—The case of James Hume, æt. 21, presented an instance of that very common and distressing ulcer which is usually ascribed to inversion of the nail. The application of caustics to destroy the morbid sensibility of the irritable surface, and interposition of various protecting matters between it and the edge of the nail, and even the free excision of all the overlapping fold of skin, afford little temporary, and no permanent relief, and I have actually known amputation of the toe recommended as the only remedy for this apparently trifling, but most annoying complaint. M. Dupuytren is entitled to much gratitude from persons thus afflicted, for devising an easy and effectual mode of relieving them, viz. removal of the nail in whole or in part. This may appear a very difficult and painful operation, but is neither one nor other if properly performed. One of the blades of strong sharp-pointed scissors should be pushed upwards close under the nail to its root, to which extent it is then to be divided at one stroke, when one of the portions being seized firmly with a pair of dissecting forceps, may be easily extracted in a lateral direction, and then the other, if it is deemed necessary to remove the whole nail, which, however, is seldom the case. In the present instance, the patient had laboured for nearly two years under this distressing affliction, which

rendered him very lame. He was treated in the way described with perfect success.

*Lithotomy.*—George Calder, æt. 13, applied on account of pain in making water, with frequent desire to do so, under which complaints he had laboured more or less for eleven years. I sounded him and detected a stone. I performed the usual operation on the 16th of March, and extracted a very large mulberry calculus, the largest and roughest that either I or any of the gentlemen present had ever seen. The patient suffered no unpleasant symptom after the operation, except a pretty copious secretion of mucus, and deposition of an ammoniaco-magnesian phosphate between the lips of the wound. He was dismissed cured on the 4th of May.

In this case, the first thing deserving of notice was the small inconvenience suffered by the patient from so large and rough a stone; the best proof of which is, that he had lived eleven years in Edinburgh, where surgical assistance is so readily obtained, without ever having it required for him. It is a curious but well-ascertained fact, that the severity of calculous symptoms is always in direct proportion to the derangement of the urinary secretion; and this is probably the reason that the mulberry calculus, which is attended with very little alteration of the urine, occasions less distress than any other, though its distinguishing roughness would seem to render it the most irritating of the whole. The second remarkable circumstance, is the deposition of the triple phosphate, which accompanied the increased secretion of mucus, appearing when it commenced, and ceasing when it stopped upon the closure of the wound. There was here a good illustration of the mode in which calculi are so frequently encrusted with the triple phosphate, in persons who have suffered great irritation from the disease. The excess of mucus secreted by the excited bladder promotes the putrefactive tendency of the urine, which converting the urea into carbonate of ammonia, thus occasions the precipitate in question.

Mr S., æt. 55, was recommended to my care by Dr Mitchell of Ellom, Aberdeenshire, on account of stone in the bladder, and entered the Hospital as a private patient on the 28th of April.

On the 1st of May I extracted a very large flat-shaped triangular calculus, composed of uric acid, and weighing nearly four ounces. The urine came away freely. The patient made no complaint of pain in the region of the bladder; never felt the slightest tenderness on pressure in the hypogastric region, or any other part of the abdomen; but he began soon after the operation to complain of sickness, thirst, and restlessness, with

a quick pulse and parched red tongue. He continued in this state, gradually becoming weaker until the 14th day, when he died. We found on dissection a diffused suppuration in the cellular substance exterior to the left side of the bladder. In each kidney there was a calculus composed of uric acid.

Since the date of last Report, some cases of lithotomy have occurred in my private practice which seem deserving of notice. Mr George White asked me to assist him in the removal of a stone from the bladder of Mrs ——, a middle-aged female, who had been long confined to bed from other causes, and severely tormented with the usual symptoms of calculus. Mr White had found the parts unable to bear the irritation of sponge-tent; and by means of the simple dilating instrument which I have described in a former Number of this Journal, widened the urethra considerably, but not so much as was required, owing to the insufferable distress experienced by the patient when he attempted to do so. Having introduced my finger, I ascertained that the resistance to farther dilatation was seated at the neck of the bladder; and, therefore, introducing a straight blunt-pointed bistoury, made some small incisions at this part, upwards and laterally, and then extracted two large stones. The patient did well.

Mr M., *aet. 60*, came from Berwickshire to town in the beginning of April, on account of stone in the bladder, from the symptoms of which he had suffered to an excessive degree for several years; indeed, he had not been free from gravellish complaints for the long period of fifteen years. His sufferings were unusually constant and severe. Motion of any sort was particularly distressing, and could be tolerated only when he stooped forwards; and, in these circumstances, his long journey of sixty miles could hardly have been performed by one less resolute than himself; but he was determined to be relieved; and though his friends considered his return alive as nearly hopeless, he accomplished the undertaking by travelling in a carriage of his own, which was fitted up with straps, that enabled him to stand constantly stooping forwards, the only posture, as already mentioned, in which he could bear to be moved. When he arrived, I certainly considered him a most unfavourable subject for the operation. He was excessively corpulent. His tongue was red and dry, and his thirst constant. In performing the operation, the first difficulty encountered was presented by the unwieldiness of the patient, whose limbs could by no means be approximated, so as to admit of being secured in the usual way. Having cut into the bladder, I extracted two small stones and two larger ones, the size and shape of pigeons' eggs. In order to ascertain if any more still

remained, I searched carefully with a curved staff ; and finding it strike against another behind the pubes, I endeavoured to perform extraction with straight and curved forceps. But the extreme thickness of parts, and the consequent depth of the wound, prevented me from depressing the handles of the instruments sufficiently to lay hold of the stone, or indeed even to touch it ; and some attempts to dislodge it, by means of curved scoops having proved equally unsuccessful, I resolved, though no advocate for the operation *en deux temps*, to postpone any further proceedings for removal, until there was reason to suppose that the stone had shifted into a more favourable position.

The patient made no complaint whatever after the operation ; and the tube for allowing the urine to escape being withdrawn two days afterwards, I searched for the stone but without success ; and it was not until the second day following that I could bring an instrument into contact with it. It now lay more favourably for extraction, though still very deep, viz. nine inches by measurement from the mouth of the wound. Having laid hold of it with a pair of forceps, I extracted with great ease a stone similar in shape, but intermediate in size to the two larger ones formerly taken out. The patient made a good recovery, and was walking abroad on the fourteenth day after the operation. He has returned home perfectly well.

On the 20th of April I was requested by Dr Barker to operate on Mr R., æt. 70, who had suffered from stone for two or three years.

Having cut into the bladder, I introduced my finger, and felt, instead of the cavity, a large round tumour the size of an egg, which I recognized as an enlargement of what is called the middle lobe of the prostate. By means of a straight bistoury, I cut through this swelling sufficiently to admit the forceps, and then attempted to lay hold of the stone ; but found it impossible to do so until the patient's breech was sufficiently elevated to let it escape from the pouch, in which it lay behind the enlarged prostate. For the first three days after the operation the patient did well, with the exception of complaining almost constantly of a severe pain at the point of the penis. During the fourth night, having got out of bed to go to stool, he suffered a profuse hemorrhage from the wound, which exhausted him very much for the time. He rallied, however, and gave us hopes of his ultimate recovery ; but his strength gradually declined, his stomach being extremely irritable, so as to prevent the reception of any support ; and he died a fortnight after the operation. On dissection, there was not the slightest trace of disease in the cavities either

of the abdomen or pelvis. Neither was there any appearance of inflammation in the bladder ; and the only part which seemed to suffer from disease was the prostate, which was greatly enlarged throughout, but especially upwards towards the cavity of the bladder.

*Hydrocele.*—In the last Report, I mentioned the case of John Bryce, who had a hydrocele injected, and in consequence suffered an extensive sloughing of the scrotum, though the wine had been retained a very short time from the apprehension of such an occurrence, owing to the irritability of the patient, which his appearance strongly indicated. The cure, though delayed on this account, was satisfactorily completed, and he was dismissed on the 14th of March.

The cases of Alexander Mackenzie, who was operated upon on the 16th of February, and Robert Glassil on the 11th of April, presented nothing remarkable either in the appearance of the disease or in the result of the operation ; but that of Finlay Thomson, æt. 58, admitted on the 30th of March, was deserving of notice, from the very unusual shape and situation of the swelling, which completely resembled an inguinal hernia. The testicle being at the bottom of the tumour could be felt distinctly on all sides, so that there is reason to believe the water did not lie in the cavity of the tunica vaginalis, but in the chord. I drew off the water, and threw in the usual injection, but did not allow it to remain above two minutes, as the patient complained severely of pain. Little inflammation followed, and I applied one or two blisters, which seemed to have a good effect in promoting the absorption of the fluid that was subsequently effused. He was dismissed with little remains of the swelling, and was instructed to return if it increased, to have the operation repeated, when he might depend upon its being effectual, as the previous trial would warrant a more severe irritation.

There is at present in the Hospital a case of hydrocele, rather interesting in respect to its origin and diagnosis. James Baptie, æt.  $2\frac{1}{2}$ , had a congenital inguinal hernia, which was easily reducible until some months ago, when he was attacked with scarlet fever and lay six weeks in bed. Upon his recovery the swelling was observed to be irreducible, and he was brought to me for advice as to what was to be done. On examination I ascertained that the tunica vaginalis, instead of containing intestine, as it had formerly done, was now only distended with fluid. The water has been drawn off, and if it re-accumulates, the operation for the radical cure by injection will be performed.

I may take this opportunity of remarking, that it is not very uncommon to meet with hernia humoralis or swelled testicle in infants and children of tender age. This fact is important in respect to the diagnosis of complaints in this situation, since surgeons unacquainted with it might be led to suppose that a non-fluctuating tumour of the scrotum at this early age must depend on a hernia. I have more than once been consulted in cases where rupture bandages had been prescribed for the complaint in question.

*Extirpation of the Testicle.*—James Gray, æt. 22, was admitted 5th March, on account of an extensive sinus, with swelling and great induration of the right epididymis. The complaint had existed for eighteen months, and had resisted the ordinary measures of cure. I dilated the sinus freely, and ordered camphorated mercurial ointment to be rubbed over the swelling, and sulphate of zinc wash to the sore. A succession of abscesses followed; the patient became weaker and weaker; and the sinuses which were successively laid open almost insulated the testicle. In these circumstances, as the organ could not be supposed capable of performing any useful function even if preserved, its extirpation was proposed to the patient and readily agreed to. It was performed on the 6th of April, and the patient was dismissed cured on the 24th.

In performing castration, the great apprehension usually entertained is retraction of the arteries, which is generally attributed to the action of the cremaster muscle. But a little reflection as to the origin of this muscle must be sufficiently convincing that it cannot perform the effect in question, which is plainly owing to the elasticity of the vessels themselves. Whenever, therefore, there is reason to suppose, from the bulk of the swelling, that the arteries have been subjected to much extension, the surgeon ought to provide a steady and intelligent assistant for holding the chord after its division until the vessels are secured. The more skin that is taken away the better, provided enough is left to allow the edges of the wound to be brought into contact, since the risk of bloody and purulent collections is thus greatly lessened.

*Stricture of the Urethra.*—George Cockburn, æt. 32, who was mentioned in the last Report as having applied on account of retention of urine, owing to a very tight stricture of the urethra, was cured by the successive introduction of gradually enlarged steel bougies.

Alexander Geddes, æt. 45, applied on the 25th of March, on account of a large swelling of the right testicle. Being questioned as to his powers of making water, he stated that the

stream was very small, and could not be projected above a couple of inches from the orifice of the urethra ; that he had frequent desire to empty his bladder, and considerable difficulty in doing so. On examination, three strictures were discovered, one at the neck of the glans, one where the penis becomes pendulous, and one at the bulb. The usual practice was followed with complete success,—indeed, the swelling of the testicle had nearly disappeared by the time that the urethra was so far dilated as to admit No. 1, and he now makes water with perfect freedom.

Charles Dickie, æt. 40, applied on the 26th of April, on account of the following urinary complaints. He could not pass his water but in drops ; he could not arrest its flow when it had once commenced ; and the prepuce was excoriated from the almost constant irritation of its presence. I found the urethra very much contracted, hardened, and irregular, but by using the means already mentioned, dismissed him completely cured, so far as regarded his unpleasant symptoms, and merely requiring to return occasionally for a week or two longer, to have the urethra dilated to its full extent.

Samuel Pringle, aged 53, applied on the 17th of February, on account of fistula in perinæo, attended with great thickening, and almost cartilaginous hardness of the parts concerned. Most of his urine passed through this aperture, and he was suffering much from the formation of an abscess in the neighbourhood. The complaint had existed for upwards of nine years, and was very distressing, especially when new abscesses formed, which was not unfrequently the case. I found a very tight stricture near the bulb, and as he lived at some miles distance in the country, took him into the house to make his cure more safe and certain. The swelling and induration of the perinæum disappeared before the bougie had been introduced many times, but the fistulous opening, though it speedily contracted, was not obliterated so soon as it would have been in a case of more recent standing. He was dismissed on the 19th of March, making his water in a full stream, having no uneasiness in the perinæum, but still passing a drop or two of urine through the fistula. He has returned since quite free from any complaint.

*Fistula Lacrymalis.*—Jean Thomson, aged 51, was admitted on the 1st of March, on account of a fistula lacrymalis, which had existed twelve months. There was considerable swelling and hardness round the opening, and a troublesome watering of the eye.

I pushed a knife into the duct, and introduced a style, which at first occasioned a good deal of irritation, and was subse-

quently worn without any inconvenience. The patient was dismissed on the 22d of April, with instructions to retain the style in its place for some time longer. She returned in about a fortnight, and stated that it having come out a few days before, she could not introduce it, but felt no reason to regret its absence, as the cure seemed quite complete.

*Stricture of Rectum.*—In last Report I mentioned the case of Robina Wright, who had laboured long under stricture of the rectum and recto-vaginal fistula. From the relief that attended the commencement of her treatment, I expected to have been able to complete the cure; but though freed from the incontinence of faeces, and greatly relieved as to the pain and frequency of these evacuations, she continued to suffer from a very copious discharge of mucus and pus, which made me suspect some incurable disease farther up the intestine, and she was therefore dismissed on the 24th of March.

*Stricture of the Oesophagus.*—The case of David Allan, æt. 49, from Arbroath, at present in the Hospital, is in some respects similar to the one last mentioned. He was treated at home by my friend and pupil Mr J. Trail, for a very tight stricture of the oesophagus, the date of which he referred to last November. The bougies at first introduced were not so large as a common quill, and yet distended the canal so fully, as to render their extraction difficult. The size was gradually increased to three-eighths of an inch in diameter, when, not finding much relief from the symptoms of his complaint, he came to town and was admitted into the Hospital. On examination, I found the stricture in the thoracic portion of the oesophagus, and passed a moderate sized bougie very easily through it. The little relief experienced by the patient from the very considerable dilatation which had already been effected, and the irritability of stomach indicated by frequent ejections of the matters introduced into it, led me to suspect that there was disease of structure as well as stricture. Dr Abercrombie has recommended small doses of the oxide of bismuth with aloes, or some other gentle cathartic, and counter irritation during the fits of aggravation which the patient occasionally suffers.

*Excision of Elbow-joint.*—In last Report I stated that James Alexander, æt. 9, from Arbroath, had entered the Hospital on account of a diseased elbow-joint, which seemed to be a proper subject for excision.

I performed the operation in the manner already described, and found that the disease was seated in the extremity of the humerus; but having occasion in removing it to cut into the

joint, I deemed it prudent to take away the articulating surfaces that remained, in order to prevent the inflammation in the first instance, and caries in the second, that might result from their being left.

The patient recovered extremely well and speedily from the operation ; but when almost quite well, and just about to be dismissed from the Hospital, he fell into a bad state of health, one effect of which was a superficial ulcer over the external condyle of the humerus that proved extremely obstinate, and yielded only to time, together with an alterative course of blue pill and sarsaparilla. He was dismissed cured on the 6th of May.

*Morbus Coxarius.*—There have been several cases illustrative of the good effects of the actual cautery in curing this formidable disease,—it may be sufficient to mention the particulars of one.

George Hutchinson, æt. 15, admitted on the 24th of March. He complains of pain in his left hip and knee, particularly when walking. His left hip is more flattened, appears longer, and its lower edge does not form such a bold line as in the other. The pain is worst during the night.

Six weeks ago he fell upon the ice and hurt his left hip ; it was very painful after the accident, but he continued to work till last week, when the pain felt at the hip and knee in walking was so great, as to confine him to the house. When he sits down after walking, it is often so severe as to prevent him from rising again.

25th, To-day the actual cautery was applied to the space immediately behind the trochanter major.

26th, He has no pain, and feels almost quite well. To have a poultice applied.

28th, To-day the slough separated, the sore is much larger than the part burned ; he has no pain ; sleeps well ; has a good appetite. Simple ointment applied.

April 7th, The sore continues to discharge ; he has no pain now even when walking.

30th, To-day he was discharged, to attend as an out-patient ; he has no pain, and only complains of a little stiffness when he straightens the limb in bed.

The following case is very interesting, as affording some information with respect to this mysterious affection, at a stage of its progress when it is rare to obtain an opportunity of dissection.

James White, æt. 14, Torwood, Stirlingshire, admitted on the 11th of March. His right leg is shortened and turned inwards ; the head of the femur is dislocated upon the dorsum of

the ileum, the trochanter major projects more than the other, and is nearer the crest of the ileum. The pelvis is twisted, the affected side being considerably higher than the other ; the right thigh is emaciated. The motions of the hip-joint are much impeded ; the limb cannot be straightened ; his appetite is bad ; he has frequent fits of sickness, and sometimes night sweats.

Last autumn he received a kick on his right hip, after which he went about in his usual way, but always complained a little of pain in the joint, worst during the night. He could not rest so much on that leg as on the other. Nothing was done for his relief till a month or two after the injury, when poultices were applied, stimulating frictions used, and blisters, without any benefit. The pain gradually increased, so that at last he was unable to use the limb.

15th. No change took place till this evening, when he complained of headach. About seven o'clock he became delirious. He worked insensibly with the bed-clothes. He was bled to  $\frac{3}{4}$ xii. Two turpentine injections were given him, which operated well, and eight grains of calomel. Leeches were applied to his forehead ; and the head was kept cool by the application of ice. Soon after he was seized with violent convulsions ; during which he ground his teeth, clenched his fists, and squinted with both eyes ; his tongue hung out at his mouth, so that he could scarcely be prevented from biting it ; his mouth was twisted to one side ; his eyes were not sensible to light ; his carotids throbbed violently ; and the jugular veins were distended with blood. His pulse during the paroxysms varied from 100 to 130 in the minute. His feet were warm ; heat of body natural ; face sometimes flushed, at other times pale. A blister was applied to each thigh, and a sinapism to the epigastric region. At twelve o'clock he became comatose, and his pulse sunk to 80.

16th, He is still insensible ; his eyes are kept shut. Two blisters to be applied to the thighs, and one to the head. Pulse natural.

17th, He opens his eyes when spoken to, and answers by nods. Seven grains of calomel ordered, and a turpentine injection, which operated. Another blister to be applied to the head.

18th, Not so well ; eyes glazed.

20th, He answers by signs, and attempts to speak, but is unable. His mouth is drawn to the right side. When food is offered him, he opens his mouth to receive it. Pulse weaker. Wine ordered.

22d, This morning he was quite insensible ; and at nine o'clock he died.

It appears that before leaving home he had been observed to be listless and drowsy, and otherwise disordered, as is usual at the commencement of hydrocephalus. And when he entered the Hospital, I was struck with the extreme stupidity and indifference of his manner, which I attributed to natural defect.

It is, I believe, thought by physicians, that the fluid in this disease is secreted as a consequence of the inflammation ; but it appears to me more probable that the fluid, being gradually effused, causes the stupor that is observed in the first instance, and then inflammation by the irritation of its pressure, while the convulsions, rigid palsy, and death, are owing to this morbid action affecting the cerebral substance. I venture, with all deference, to offer this explanation of the extreme obstinacy which characterizes acute hydrocephalus,—an obstinacy much greater than that of inflammation of the brain, or any other organ where it is not kept up by local irritation.

On dissection, the capsular ligament was found greatly distended, but quite entire, with the exception of a small aperture under the *psoas magnus* and *iliacus internus*, which afforded a communication between the cavity of the joint, and a large abscess extending up along the former of these muscles. The articular cartilage was every where completely sound ; but the acetabulum, at the part where it receives the attachment of the triangular ligament, was carious and bare on both surfaces, to the extent of about a sixpence. There was no trace of the triangular ligament. The thin and distended capsule permitted the subluxation of the femur, which had been observed during life, and accounted for the shortening of the limb, which still remained after death. The synovial membrane lining the capsule, the neck, and part of the head of the femur, had undergone what is usually called the scrofulous degeneration, and was converted into a grayish-brown pulp.

*Dislocation of the Wrist.*—My pupils confidently assure me that they reduced two cases of dislocated wrist ; and I have no reason to doubt the accuracy of their statement, except the extreme rarity of the accident in question ; but there was one case which occurred lately, seen both by Dr Ballingall and myself, that I am able to report without any hesitation. The patient was a young man, who fell on the palm of his hand, and in consequence sustained a dislocation of the carpus backwards. The bones were easily replaced by extension and coaptation.

*Fractured Radius.*—There was a case of fractured radius close to its carpal extremity in a boy, that simulated very closely the appearance of dislocation, as the detached portion

was turned backwards and fixed so firmly as to require very considerable force for its replacement.

*Fractured Tibia.*—In last Report, I mentioned the curious fact, that six cases of the tibia fractured alone had occurred since the Hospital was opened. Within the last quarter a seventh instance of this usually reputed rare accident was presented by Charles Smith, æt. 9, who fell from the top of a high wall, in endeavouring to escape from a policeman.

*Compound Fracture of Thigh.*—“John M'Donald, æt. 40, carpenter, Newhaven, admitted 29th March, states that in April 1826, he fell off the gangway into the Dry Dock at Leith, and fractured his right thigh bone. The lower portion of the femur was forced through the skin and clothes, and remained there for about half an hour. He was carried to the infirmary of this place, where he lay for eighteen weeks; at the end of which he went home, the bone being firm, but the wound still discharging about a pint a-day. It healed up at last, but soon broke out again, and continued to heal up and break out alternately till last summer, when an abscess formed, which he opened with a razor, and picked out two small pieces of bone. He then applied to several practitioners, all of whom said that nothing could be done for him,—indeed one went so far as to ask him for his leg when he died. It has continued open since then.

“At present there is, about three inches below the trochanter major of his right thigh, a sinus leading down to the femur, at the bottom of which a piece of bone can be felt bare and loose. The limb is a good deal shortened; the thigh is enlarged. He frequently feels a prickling pain in his thigh when he moves it.

“30th, To-day Mr Syme enlarged the opening and extracted with a pair of forceps a piece of bone about one inch and a-half long and half an inch broad. The one side presented a smooth surface similar to that of the femur, the other a ragged one, as if it had been removed by absorption. The wound was dressed with dry caddis.

“31st, The wound has a healthy appearance; its edges are a little hard. Poultice ordered.

“April 2d, Sulphate of zinc wash applied. The wound is rapidly contracting; no pain.

“7th, He was dismissed.”

*Rickets.*—This is a very common complaint in Edinburgh, particularly among the ill-fed sickly children of the poor people, but seldom goes so great a length as to terminate fatally. The clavicles, ribs, and inferior extremities suffer more or less distortion; the countenance is pale and tumid; and there is relaxation of the muscles and integuments. Small doses of calomel and rhubarb, warm bathing, frictions over the whole body, and the horizontal posture, are the means employed for remedying

the disease, and usually prove sufficient. Sometimes the patients die from other diseases, and then afford an opportunity of examining the state of the osseous system.

William Forbes, æt.  $2\frac{1}{2}$  applied on the 9th of March, labouring under the ordinary symptoms of rickets. The clavicles were bent to a right angle, and the thigh bones were so flexible that they appeared to have a false joint about their middle. The mother stated that the bones had been broken from slight falls, and had not united. I observed to the gentlemen present, that I had met with this occurrence in respect to the humerus, of which there are two in my possession, and that the flexibility was owing not to want of union, but to its being effected by means of cartilage. The child died soon afterwards from some affection of the head, and I have got the femurs, in each of which there is a large mass of cartilage at the seat of the fracture.

As a year has now elapsed since the Surgical Hospital was opened for the reception of patients, I think it right to subjoin a general statement of the cases that have come under treatment, in order to give some idea of the relief and instruction afforded by this institution, or rather which is likely to be afforded by it when established by the experience of years in the confidence of the public.

It will be observed, that 1900 cases of surgical disease have been presented for relief—that 265 of these have been admitted into the house—and that 95 operations have been performed.

#### OUT-PATIENTS.

Abscesses,	.	97	Caries of knee-joint,	.	.	5
Abcess in epididymis,	.	1	——— ankle-joint,	.	.	9
Amaurosis,	.	3	——— foot,	.	.	1
Aneurism of carotid artery,	.	1	——— metatarsus,	.	.	3
——— humeral,	.	1	——— great toe,	.	.	2
——— by anastomosis,	.	1	Cataract,	.	.	10
Anthrax,	.	13	Catarrh of bladder,	.	.	1
Aphthæ of gums,	.	11	Chemosis,	.	.	1
Bronchocele,	.	4	Chilblains,	.	.	3
Bruises,	.	185	Chopped lips,	.	.	5
Bunion,	.	2	Club-foot,	.	.	2
Burns,	.	31	Concussion of brain,	.	.	2
Calculus in bladder,	.	4	Curvature of spine,	.	.	3
Cancer of mamma,	.	5	Cutaneous disease,	.	.	146
——— neck of uterus,	.	1	Cut throat,	.	.	1
——— tongue,	.	1	Deafness from accumulation of wax,	.	.	8
——— lip,	.	3	Diseased teeth extracted,	.	.	52
——— scrotum,	.	1	Dislocation of jaw,	.	.	1
Cancerous ulcers,	.	5	——— humerus,	.	.	6
Cancrum oris,	.	1	——— elbow,	.	.	1
Caries of elbow-joint,	.	10	——— wrist,	.	.	3
——— olecranon,	.	2	——— thumb,	.	.	1
——— wrist,	.	4	——— finger,	.	.	1
——— thumb,	.	2	——— femur,	.	.	3 old.
——— fingers,	.	2	——— patella,	.	.	1 old.

Dislocation of ankle, . . .	1 old.	Irritable tubercle of mamma, . . .	1
Ectropium, . . .	1	——— testicle, . . .	1
Effusion into knee-joint, . . .	5	Medullary sarcoma of thigh, . . .	1
——— bursæ, . . .	12	——— fore-arm, . . .	1
——— cellular substance, . . .	12	——— face, . . .	1
Enlarged tibia, . . .	14	Morbus coxarius, . . .	16
——— glands, . . .	39	Necrosis, . . .	9
Epistaxis, . . .	1	Nephritis, . . .	1
Erysipelas, . . .	24	Omalgia, . . .	2
Exfoliations, . . .	6	Ophthalmia, . . .	80
Furunculus, . . .	24	Otorrhœa, . . .	8
Fissure in hard palate, . . .	1	Osteo-sarcoma of superior maxilla, . . .	1
Fistula lachrymalis, . . .	3	Paraphymosis, . . .	2
——— in ano, . . .	10	Partial paralysis, . . .	18
Foreign bodies extracted from hands and feet, . . .	8	Periostitis, . . .	13
Fracture of cranium, 1 old, . . .	1	Phymosis, . . .	1
——— ossa nasi, . . .	1	Poisoning, . . .	1
——— ribs, . . .	15	Polypus nasi, . . .	3
——— clavicle, . . .	9	——— auris, . . .	1
——— humerus, . . .	12	Prolapsus ani, . . .	4
——— olecranon, 1 old, . . .	2	Pterygium, . . .	1
——— ulna and radius, . . .	2	Rachitis, . . .	9
——— radius, 1 old, . . .	8	Retention of urine, . . .	5
——— ulna, . . .	1 old.	Rheumatism, . . .	62
——— metacarpus, . . .	2	Rupture of muscular fibres, . . .	4
——— phalanges, . . .	1	——— tendo Achillis, . . .	2 old.
——— do. compound, . . .	1	Sciatica, . . .	8
——— femur, . . .	7	Scirrhus of mamma, . . .	2
——— patella, . . .	1 old.	Short frœnum, . . .	2
——— tibia and fibula, . . .	3	Sinuses, . . .	21
——— do. do. compound, . . .	1	Sore throat, . . .	26
——— tibia, . . .	7	Spina ventosa of metacarpus, . . .	3
——— fibula, . . .	4	Sprains, . . .	86
Fungus hæmatodes of mamma, . . .	1	Stricture of œsophagus, . . .	1
——— foot, . . .	1	——— rectum with recto-vaginal fistula, . . .	1
Fungus of testicle, . . .	1	——— urethra with fistula in perineo, . . .	2
Ganglion, . . .	4	——— urethra, . . .	9
Gonorrhœa, . . .	18	Syphilis, . . .	20
Hæmatocèle, . . .	2	Tic Douloureux, . . .	3
Hare lip, . . .	2	Tumours, . . .	22
Hemorrhoids, . . .	8	Ulcers, . . .	265
Hernia reducible, . . .	16	Ulcerated cartilages of knee-joint, . . .	3
——— strangulated, . . .	1	——— ankle, . . .	1
——— cerebri, . . .	1	Varicose veins, . . .	12
——— humoralis, . . .	12	Vertebral diseases, . . .	12
Horn on lip, . . .	1	Warty excrescences, . . .	6
Hydrocele, . . .	9	Weakness of lower extremities, . . .	10
Hypospadias, . . .	3	Whitlow, . . .	21
Incontinence of urine, . . .	8	Wounds incised, . . .	41
Inflammation of veins, . . .	9	——— punctured, . . .	22
——— absorbents, . . .	3	——— lacerated, . . .	30
——— joints. . .	15	Wry neck, . . .	1
Inversion of toe nail, . . .	1		
Iritis, . . .	5		
			1900

**IN-PATIENTS.**

Abscesses, . . .	7	Aneurism of carotid artery, . . .	1
——— of mammae, . . .	4	——— humeral, . . .	1
Abscess in epididymis, . . .	1	——— by anastomosis, . . .	1
Amaurosis, . . .	1	Bronchocele, . . .	2

Bruises,	.	10	Hæmatocelc,	.	2
Bunion,	.	1	Hemorrhoids,	.	1
Burns,	.	4	Hernia strangulated,	.	1
Calculus in bladder,	.	4	— humoralis,	.	1
Cancer of mamma,	.	2	Hydrocele,	.	6
— scrotum,	.	1	Hypospadias,	.	1
Cancerous ulcers,	.	1	Inflammation of veins,	.	2
Caries of elbow-joint,	.	5	— joints,	.	1
— humerus,	.	1	Inflamed tibia,	.	1
— olecranon,	.	2	Iritis,	.	1
— wrist,	.	2	Irritable tubercle of mamma,	.	1
— thumb,	.	1	Medullary sarcoma of thigh,	.	1
— knee-joint,	.	2	— face,	.	1
— ankle-joint,	.	3	Morbus coxarius,	.	6
— foot,	.	3	Necrosis of rib,	.	1
— great toe,	.	2	— femur,	.	1
Cataract,	.	1	Nephritis,	.	1
Catarrh of bladder,	.	1	Omalgia,	.	2
Concussion of brain,	.	2	Ophthalmia,	.	3
Cut throat,	.	1	Osteo-sarcoma of superior maxilla,	.	1
Dislocation of humerus,	.	2	Ovarian tumour,	.	2
— femur,	.	1	Partial paralysis,	.	1
Effusion into knee-joint,	.	2	Paralysis of bladder,	.	1
— bursæ,	.	2	Periostitis,	.	1
Enlarged glands,	.	2	Poisoning,	.	1
— tonsils,	.	2	Phrenitis,	.	1
Erysipelas,	.	2	Prolapsus ani,	.	2
— phlegmonous,	.	3	Pterygium,	.	1
Excoriations of anus,	.	1	Rupture of muscular fibre,	.	1
Exfoliations,	.	2	Scirrhous of mamma,	.	1
Furunculus,	.	1	Sinuses,	.	5
Fissure in hard palate,	.	1	Sprain,	.	1
Fistula lachrymalis,	.	1	Stricture of œsophagus,	.	1
— in ano,	.	4	— rectum, with recto-vaginal	.	
Fracture of ribs with emphysema,	.	2	fistula,	.	1
— clavicle,	.	2	— urethra, with fistula in pe-	.	
— humerus,	.	7	rinæo,	.	2
— olecranon,	.	1	— urethra,	.	4
— radius,	.	2	Syphilis,	.	4
— phalanges compound,	.	1	Tic Douloureux,	.	1
— femur,	.	5	Tumours,	.	5
— tibia and fibula,	.	4	Ulcers,	.	40
— tibia and fibula compound,	.	1	Ulcerated cartilages of ankle,	.	2
— tibia,	.	7	Vertebral disease,	.	2
— fibula,	.	2	Warty excrescences,	.	5
Fungus hæmatodes of mamma,	.	1	Whitlow,	.	4
— foot,	.	1	Wounds incised,	.	3
Fungus of testicle,	.	1	— punctured,	.	3
Ganglion,	.	1	— lacerated,	.	4

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## OPERATIONS.

Amputation of thigh,	.	4	Excision of olecranon,	.	1
— arm,	.	2	— testicle,	.	1
— leg,	.	4	— fungus of testicle,	.	1
— great toe,	.	2	— tumour,	.	11
— thumb,	.	1	— tonsils,	.	3
— finger,	.	6	— cancerous sores,	.	5
Excision of elbow-joint,	.	5	— warty excrescences,	.	4
— knee-joint,	.	2	Lithotomy,	.	4
— upper jaw bone,	.	1	Strangulated hernia,	.	1
— mamma,	.	4	Aneurism,	.	2

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Cataract,	.	1	Hemorrhoids,	.	.	6
Fistula lachrymalis,	.	1	Polypus nasi,	.	.	3
Pterygium,	.	1	— auris,	.	.	1
Hydrocele,	.	5	Exfoliations removed,	.	.	6
Hæmocele,	.	2				—
Fistula in ano,	.	4				95
Recto-vaginal fistula,	.	1				

To complete this Report, I may mention the expence that has been incurred in instituting and conducting the establishment, which consists of one house-surgeon, a steward, house-keeper, cook, house-maid, two nurses, and twenty-four patients. My senior apprentices write the patients' cases, the juniors dress them, and the care of the out-patients is distributed over the whole, according to their progress, activity, and intelligence.

The following is an abstract of the treasurer's account:—

### Abstract of Hospital Account from May 1829 to May 1830.

By subscriptions and donations from the public,	.	L.217	14	0
— payments from Mr Syme,	.	779	7	0
— interest from bankers,	.	1	3	10
		L.998	4	10

To paid fitting up, including advertising and sundries,	.	L.362	15	7
— rent,	.	100	0	0
— weekly expenditure,	.	393	19	9½
— taxes and water duty,	.	15	3	4
— servants' wages,	.	64	10	0
— medicines,	.	61	16	1½
		L.998	4	10

In conclusion, I have to regret my inability to express in adequate terms the deep and grateful sense which I feel of the kind and judicious advice of my respected colleague, Dr Ballingall, my obligations to whom, if stated particularly, would have greatly extended the length of these Reports.

FIFTH QUARTERLY REPORT  
OF  
THE EDINBURGH SURGICAL HOSPITAL,  
FROM 8TH APRIL TO 8TH AUGUST 1830.

BY JAMES SYME, Esq.

FELLOW OF THE ROYAL COLLEGE OF SURGEONS LONDON AND EDINBURGH, AND LECTURER ON SURGERY IN EDINBURGH.

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(*From the Edinburgh Medical and Surgical Journal, No. 105.*)

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**I**N commencing this Report, I have great pleasure in stating that the College of Surgeons of Edinburgh now recognize, not only the Clinical Lectures, but also the attendance of the Surgical Hospital, as qualifications for their diploma.

I may take this opportunity of explaining the sources from which were derived the L. 800 that appeared in last Report as paid by me to the support of the institution.

Fees of Students attending my Clinical Lectures, . . . .	L. 400
Board of two House Surgeons for six months, and one do. for twelve months,	200
Surplus of expenditure required from myself, . . . .	200
	<hr/>
	L. 800

Since last Report, 545 cases of surgical disease have been presented for relief. Of these 82 have been admitted into the house.

*Excision of Elbow-Joint.*—John Malloch, æt. 30, from Perth, a missionary of the Baptist persuasion, entered the Hospital on the 23d of June on account of a diseased elbow-joint, of which the following account appears in the Journal.

" His left elbow is very much enlarged, oedematous, and inflamed. There are two sinuses communicating with the joint; one situated immediately over the olecranon, and the other about three inches lower down. There is little pain, except on pressure, when it is very acute. He cannot allow of any motion of the joint, keeps his fingers extended, and seems to be afraid of moving the arm in the slightest degree.

" Seven years ago, he fell upon his left elbow and bruised it; two months afterwards it swelled and suppurated, and continued to discharge through several successive openings for two years. It then healed up, but remained swelled and stiff. Last January he was attacked with severe pain in the joint, which increased till five weeks ago, when matter formed, and was discharged by one of the former openings. A fortnight afterwards, another abscess collected over the olecranon, and was opened by a surgeon in Perth.

" 25th, Mr Syme proceeded to cut out the elbow-joint. Running his knife into the joint, with its back to the ulnar nerve, he made a transverse incision across the arm, close to the olecranon, as far as the external condyle. From the middle of this incision another was made down the arm over the ulna about three inches in length, and from the extremities of the one first mentioned there were made two up the arm about two inches long. The flaps being dissected back, the articulating extremities of the ulna, humerus, and radius were removed. The diseased synovial membrane was cut out, and the edges of the wound were then brought together by stitches. Two arteries spouted, but did not seem to require ligatures. The limb was placed in a bent posture enveloped with caddis and a long bandage, to give it support. In this case Mr Syme deviated from his usual practice, by making a longitudinal incision downwards from the centre of the transverse one, instead of two at its extremities, since he thus included the sinuses in the line of incision, and more readily exposed the ulna, which was the bone principally diseased.

" Cloths wet with cold water were applied after the operation to check the disposition to bleed; but about two o'clock, as there was still a good deal of hemorrhage, Mr Syme removed the dressings, and found it to proceed from an artery in the integuments of one of the lower flaps. The bleeding vessel being tied, the dressings were then replaced.

" 26th, The wound is looking very well, and seems as if it would heal by the first intention. Pulse quick. Cold lotion to be continued. Tartrate of antimony, with Epsom salts, to be taken every hour.

" 28th, There is a good deal of constitutional irritation.

He complains of oppression over the stomach, and a little difficulty of breathing. The wound has not healed.

" 29th, A copious foetid discharge from the elbow, with some redness and tension.

" 30th, Feels much better; swelling subsiding. Acetate of lead lotion, with bandage, to be continued.

" July 1st, Appetite much better. To sit up in bed.

" 2d, He was out of bed most of the day.

" 3d, The redness and swelling are quite gone. The edges of the wound to be brought together with adhesive plaster, and sulphate of zinc wash to be applied with bandage.

" 5th, The elbow is looking well, and the wound is granulating kindly. To have steak and a pint of porter.

" 9th, He had rigors yesterday. Elbow appears to be doing very well.

" 15th, The cross incision has almost healed, but the longitudinal one is kept open by the ulna being bare at its extremity, which threatens to exfoliate. A large abscess has formed on his right hip.

" 16th, The abscess was opened and a poultice applied.

" 19th, He has had frequent shivering and sweating fits; pulse quick and weak. To have wine instead of porter. Mr Syme laid open the sinus in the hip, the discharge from which was profuse. Dry caddis and bandage applied. The elbow is improving, the discharge is not nearly so great; and a distinct groove can be felt on the ulna between the dead and living bone.

" 20th, He thinks himself stronger; the rigors are not so frequent. To have sulphate of quinine, a grain and a-half three times a-day, and a glass of port wine every three hours.

" 24th, He had rigors twice yesterday afternoon. About two o'clock this morning, when at stool, there was considerable hemorrhage from the hip. He is weaker than yesterday, and complains of great pain in his right groin, which is a little swelled.

" 25th, He is no better, pain in the groin is still much complained of.

" 26th, His pulse is much weaker, the pain in the groin is excessive; obscure fluctuation can be felt on the iliac side of the vessels.

" 27th, He complains of embarrassment in his breathing, with pain of chest. Pulse 160.

" 29th, He has been slightly delirious; other symptoms as before; he is much weaker.

" 30th, Cold cloths applied to his forehead at his own desire. Pulse can hardly be felt.

" 31st, He died."

On dissection the abscess of the hip was found to extend upwards among the muscles as high as the lumbar region. There was an extensive abscess between the ilium and iliacus internus descending into the groin. There were old adhesions between the pleura pulmonalis and costalis on both sides, but especially on the right. Upon the centre of the anterior surface of the left lung lymph had been recently effused to a considerable extent, and about eight ounces of sero-purulent turbid fluid lay in the pleura of the same side. The lungs in several parts were indurated or hepatized, and in some places suppuration had taken place so as to form deposits of the size of a walnut. On the surface of the brain the vessels were more turgid than usual, and in some places there were small ecchymoses. Great part of the wound was healed, but the extremities of both the humerus and ulna were exfoliating.

This unfortunate man, whose thin emaciated care-worn appearance indicated an age not less than fifty, though it really was no more than thirty, was certainly, as the result showed, a most unfavourable subject for operation. At the same time this is the only one of ten cases of excision of the elbow-joint which has terminated fatally ; and I sincerely believe, that any operation, however slight, which had the effect of at all disturbing the constitution, would have given rise to equally disastrous consequences. This extreme tendency to disordered action could of course be learned only when it was too late.

David Forret, æt 28, from Cupar-Fife, recommended by Dr Scott of Cupar, on account of a diseased elbow-joint, of which he gave the following account : " Nine months ago he began to be troubled with a gnawing pain at the back of his right elbow, as if between the ulna and humerus. There was then no swelling ; the motion of the joint was somewhat impeded, but did not increase the pain. In January, he observed a small tumour, about the size of a bean, a little above the internal condyle, which broke two weeks afterwards, and has continued to discharge ever since. Up to this time he had not been incapacitated from working, the pain which he felt being only moderate, and ascribed to rheumatism. But four months ago, without sustaining any injury, the joint inflamed, becoming red, swelled, and excessively painful, so as to render the slightest motion intolerable. He was blooded and leeched repeatedly, by which means the activity of the disease was subdued, and shortly afterwards, another opening made its appearance on the outside of the olecranon. The constant discharge, gnawing pain, stiffness of the joint, and general exhaustion consequent on this severe and protracted disease, have

made him extremely anxious to obtain relief, and willing to submit to any measures necessary to afford it. He is thin, pale, and evidently much reduced by his sufferings."

This case evidently required either excision or amputation. My friend Mr Webster, Surgeon of the 4th Dragoon Guards, who saw the patient on his admission, and who had not at that time witnessed the operation of excision, declared that he would have no hesitation in amputating the arm. Though there was evidently very extensive disease of all the soft parts, I did not consider this any objection to excision, and, accordingly, performed the operation in the usual manner, that is, by making a transverse incision from the ulnar nerve to the external tuberosity of the humerus, close to the olecranon, and then one upwards and downwards at both of its extremities. All the bones entering into the articulation were very much diseased, the cartilage being abraded and the surface carious. The synovial membrane, being very much thickened and gelatinous, was cut away as far as possible, one small artery of the integuments was tied, and the edges of the transverse incision were stitched together; but the extreme softness of the diseased integuments rendered it impossible to close the longitudinal ones in this way, as the threads instantly cut their way out. Caddis and a bandage were then applied.

The patient has done extremely well; the swelling of the joint is now almost gone; the discharge is almost entirely ceased; and he has the prospect of being soon dismissed cured.

Elizabeth Johnston, æt. 16, from Falkirk. In the first of these Reports, I mentioned the case of this girl, who entered the Hospital last summer on account of a diseased elbow-joint, which exhibited the most formidable appearance of any that I have yet met with, but which, nevertheless, was completely cured by the operation of excision. She returned home, and remained perfectly well, using the arm for all ordinary purposes until December last, when, after exerting herself too much, her wrist swelled and became painful. Tartar emetic ointment was applied, and afterwards blisters; but an abscess soon formed, which opened, and has continued to discharge ever since. A probe introduced into the sinus, which is situated over the lower end of the radius, enters a large carious cavity of the bone, and can be pushed downwards into the wrist-joint.

As amputation appeared the only resource, it was performed on the 24th June above the elbow, by the method of double flap. She recovered most favourably, and is now well.

The elbow being dissected, afforded a specimen of the union which is established between the bones in such cases. When the integuments and muscles were dissected off, the appearance

presented was wonderfully little different from that of a natural joint, owing to a great mass of fibrous ligamentous-looking substance which connected the bones together. This connecting medium, which was above an inch in length, and perfectly flexible, did not constitute any thing analogous to an ordinary articulation, and more resembled the structure that usually exists in the false joints that result from fracture of the bones. My friend and pupil, Mr Charles Bell, made a sketch of the preparation, which gives a very good idea of its appearance, and which, therefore, I have caused to be engraved to illustrate this description.

The unfortunate occurrence of disease in the wrist after that of the elbow had been removed, certainly affords no objection to the operation of excision. In one of these Reports I mentioned the case of an old woman, whose hand I removed on account of caries of the wrist, and who afterwards required amputation of the arm, for disease of the elbow-joint. No one, I suppose, would consider that case any objection to the operation of amputation.—In the last number of this Journal, Dr Christison has stated, that, from what I have seen of excision of the knee-joint, I am not inclined to practise or recommend it any more than M. Roux, who also thought it right to satisfy himself as to the advantages of the operation in regard to this joint by actual trial. But in the diseases of the shoulder and elbow-joints requiring removal there cannot be a doubt that the introduction of excision instead of amputation is a very great improvement. Most of the patients on whom I have operated now use their arms for all the purposes, and with the same facility, as formerly. It has seemed surprising, that in the course of eighteen months I should have had occasion to perform the excision of ten elbow-joints. To account for this it will be sufficient to recapitulate the places from which the patients came.

Edinburgh	3	Falkirk	1	Cupar	1
Aberdeen	1	Auchtermuchty	1	Perth	1
Lanark	1	Arbroath	1		—
					10

*Caries of Trochanter Major.*—James Lothian, æt. 40, applied on the 13th of July, on account of a sinus of the hip, which opened behind the trochanter major, and allowed a probe to enter very deep. As the complaint had existed for sixteen years, I concluded that it must be connected with diseased bone; and thinking it possible that an exfoliation of the ischium might be the root of the evil, as in the cases described in a former number of this Journal, I admitted the patient, in order to examine his case more particularly. Having found that the trochanter major was carious, I did not think it prudent to undertake any

operation, as the results of attempts to remove caries of this part, as far as I knew, had been uniformly fatal. He was dismissed on the 16th, and then entered the Royal Infirmary, where the diseased bone was extracted. He died a few days afterwards.

In proceeding to relate the following cases, I feel at considerable loss as to the title by which they ought to be designated. They are chronic affections of the joints, very much resembling each other in their causes, symptoms, and treatment, but the precise tissue in which they originate, and chiefly reside, as well as the morbid alterations of structure that attend their commencement, and precede the final state of suppuration and caries, which is the same in all, have not hitherto been satisfactorily ascertained. Rust of Berlin has employed the term *arthrocace*, or joint-evil, to express this affection, denoting the particular joint concerned, by prefixing the word designating it in the same language. Thus, he speaks of Spondil-arthrocace, or Vertebral-disease, Cox-arthrocace, or Hip-disease, Gon-arthrocace, or Knee-disease, Om-arthrocace, or Shoulder-disease, Olecran-arthrocace, or Elbow-disease. This nomenclature is generally followed by German writers, and I have used it in these Reports to express the disease in question, when affecting the shoulder; but as I have been accused of pedantry for doing so, I fear that the certainly somewhat uncouth expressions just mentioned, as applied to the corresponding affection of the knee and elbow, might give still more offence, and, therefore, will use their English equivalents.

*Hip-Disease.*—Jean Spowart, æt. 8, applied at the Hospital on the 8th of July. Her left leg seemed much shorter than the right one. The hip was more round and projecting than usual. She complained of great pain in the joint, particularly at night. She could not rest any weight upon it, but allowed it to be pretty freely moved. This affection was referred to a strain received in falling five months ago.

As no fluctuation could be discovered, I concluded that the disease was still in its second stage, and within reach of relief from the actual cautery. It was applied accordingly, and the patient has already derived so much benefit, that she sleeps without any disturbance from pain, and can rest the weight of her body upon the affected limb.

*Knee-Disease.*—Thomas Brown, æt. 20, from Larbert, Stirlingshire, entered the Hospital on the 28th of May, on account of an enlargement of the knee, which was of very considerable size, chiefly about the head of the tibia, impairing the mobility of the joint, rendering any attempts at motion excessively painful, and occasioning at night, even when kept quite still, such uneasiness as to prevent the patient from sleep-

ing. The complaint had existed twelve months, and been particularly severe during the last five.

The actual cautery was applied very freely on both sides of the knee, so as to cause a large slough of the skin, partly by its direct effect, partly by the inflammation which resulted from its operation. So soon as the suppuration was fairly established, the patient began to mend. The nocturnal pains left him, the swelling diminished, the joint became more moveable, and he could rest his weight upon it. He was dismissed on the 12th of July with every prospect of retaining a limb not certainly so sound or useful as it originally had been, but still so far recovered as to be quite sufficient for enabling him to follow an employment not requiring much active exercise.

Mrs Harvey, *aet. 32*, residing in Leith, was reported to the Hospital on the 11th of June, on account of a diseased knee, which it was thought would require amputation. Her friends were desired to bring her up, but next day intimated that they had found it impossible to effect her conveyance, owing to the extreme agony which was occasioned by any attempt to move her. In these circumstances, I suggested that she ought to be placed in a large clothes basket, which would render her removal equally easy and free from pain. This was accordingly done, and she entered the Hospital on the 13th of June. The following account of her case appears in the Journal :—“ Her left knee is swelled to nearly twice its natural size, and exquisitely painful. The pain is constant, but increased by the slightest motion or pressure. The integuments covering the joint are not discoloured. There is great œdematous swelling of the foot and lower part of the leg. Five weeks ago she suddenly felt a violent pain in her left knee, so excruciating as to make her cry out. For some days there was no swelling, but it then appeared, and has since gradually increased. For some time she could bend the knee, but was never able to extend it without aggravating the pain. Now she cannot use the joint either for extension or flexion.” On the 14th, I applied the cautery very freely to both sides of the joint. On the 16th, there was no pain except from the burn. She has since been progressively improving; the swelling has entirely disappeared both from the knee and foot; she can move it pretty freely without pain; she has been dressed and sitting up; and is about to leave the Hospital.

*Elbow-Disease.*—Helen Pentland, *aet. 30*, was admitted on the 5th of May, on account of a painful swelling of the right arm, which extended from the elbow to the hand. The pain extended generally through the limb, but was particularly severe at the elbow and wrist. The elbow was much enlarged and exces-

sively painful, especially during the night, and when subjected to pressure, or attempts to move it from the semi-bent position, in which she invariably kept it. Five weeks ago, without any assignable cause, she felt a pain in the elbow. It continued not very severe for four or five days, and seemed to be subsiding under the use of frictions. A most violent pain then all at once came on, and the joint began to swell. The symptoms rapidly increased. She had fits of excessive pain, during which the muscles near the joint were spasmodically contracted. The joint was leeched, poulticed, and bled to the extent of twelve ounces by cupping. The swelling and redness diminished, but the pain continued constant. She then applied to a surgeon, who prescribed warm fomentations, and led her to believe that amputation was the only remedy.

I applied the actual cautery on both sides of the olecranon, so as to make two long eschars. She improved progressively. The following report appears for the 29th. "A very great improvement has taken place. The arm is now of the natural shape and size; she has no pain even on pressure; but there is still little motion of the joint." She was dismissed on the 15th of June, with no complaint except imperfect mobility, to correct which, she was advised to use warm bathing, frictions, and frequent gentle exercise.

William Bruce, æt. 25, from Brechin, recommended by Mr Laing. The right elbow is swelled chiefly at the back part of each side of the olecranon; he has no voluntary power of moving the joint, and when motion is effected by other means, it is painful and very limited. He complains of deep and constant pain, which is particularly distressing at night. The pain is not confined to the elbow, but extends through the limb, and is particularly severe at the wrist.

"Five years ago, the elbow swelled and became painful without any assignable cause. These complaints were mitigated by blistering, &c. but continued so severe as to require his dismissal from the army, in which he served in the 75th Regiment. The joint continued swelled and subject to occasional attacks of pain until three months ago, when the symptoms attained the intensity and constancy above stated."

I applied the cautery on the 2d of July. For eight or ten days he did not admit that any benefit had been experienced, but then began to perceive a sensible alteration in the appearance of the limb, as well as in the uneasy sensations proceeding from it. The swelling is now nearly gone, and the pain much diminished; but he still complains of tenderness about the head of the radius, where there is also a degree of fulness that makes me apprehensive as to the issue of the case.

As the cautery which is best calculated for effecting counter-irritation differs from that employed to arrest hemorrhage and destroy morbid structures, the only uses to which it has hitherto been applied in this country, I have thought it right to give a representation of the instrument recommended by Rust, which may be readily constructed by any ordinary blacksmith.

*Thickening of the Synovial Membrane of the Knee-joint.—* John Campbell, æt. 15, Blair Athole, recommended by Dr Stewart, entered the Hospital on the 28th of May, on account of a soft elastic swelling of the right knee, chiefly over the condyles of the femur and on each side of the patella. It is not painful on pressure, or motion of the joint, but he is unable to rest the weight of his body upon the limb. The complaint commenced about three months ago, after a slight injury of the joint, which he sustained by striking his knee on the side of his bed. It has been poulticed, leeched, and blistered.

I directed the knee to be blistered on both sides, afterwards to be enveloped with the following ointment spread on caddis.

Rx *Hydriod. Potassæ. 3ij. Unct. Hydrarg. c. Camph. 3j. Avungiæ. 3ij.—M.*

and then to be carefully bandaged. This dressing was changed once a-week, and was soon attended with decided improvement; the swelling disappeared, the mobility of the joint was restored, and he could walk without pain. He was dismissed on the 2d of July, with instructions to keep the knee bandaged, and to protect it as much as possible against all irritation.

*Dropsy of the Knee-Joint.—* Angus M'Pherson, æt. 16, was admitted on the 22d of June. There is enlargement of both knee-joints, with distinct fluctuation, the patellæ are felt floating, no pain, motion unimpaired.

Two months ago, without any assignable cause, he felt a stiffness of the joints; they then began to swell; he never had any pain or redness on the surface.

The joints were blistered on both sides, which speedily dispersed the fluid. He suffered a relapse from going out to walk too soon, but being subjected to the same treatment, was dismissed cured on the 15th of July.

This case forms a remarkable contrast to one treated in the house some time previously, in which the effusion was attended with excessive pain, and tenderness on motion or pressure. I lately attended a case where the pain was so distressing as to deprive the patient entirely of rest, and led to serious apprehensions for the safety of the joint. It recovered perfectly, however, under repeated bleedings and blisters.

Janet Burns, æt. 26, from Lanark, was admitted on the 23d of June, on account of a flat fluctuating tumour, about the size

of the palm of the hand, on the inner side of her right knee between the patella and condyle of the femur. It had existed for several years, and was increasing. It gave her no particular uneasiness, except apprehension as to its consequences.

Regarding this swelling as of the nature of ganglion, I made a small puncture, and evacuated a quantity of dark-coloured serous fluid. So soon as the wound was healed, I applied a blister, and afterwards made her use frictions with the iodine and camphorated mercurial ointment. As this treatment did not prevent the re-accumulation of fluid, or seem sufficient after a fair trial to produce its absorption, I made an incision about an inch long, and discharged not only a fluid similar to that formerly withdrawn, but also a quantity of soft yellow flakes, which seemed to be the remains of coagulable lymph effused at some former period. A slight degree of irritation followed, to control which she used an acetate of lead poultice. The discharge from the opening gradually diminished, and she was dismissed on the 3d of August.

This patient was one of the first cases in which I cut out the elbow-joint, and was a very unpromising one, as may be seen from the account I have given of it in the first of these Reports. The cure is nevertheless so complete, that she can use the arm (the right one) for sewing or knitting the whole day long, and when she was adjusting her dress, or arranging the applications to her knee, it was difficult for a stranger to decide which arm had been the subject of operation. I have repeatedly seen mistakes committed in doing so.

I may here remark, that a girl who came from Auchtermuchty, to have a small encysted tumour removed from her cheek, stated, that her brother, James Page, who had his elbow-joint removed last spring, (see Quarterly Report for February 1830,) now uses both arms equally; thus, for going to the well for water he carries a pitcher in each hand, and that when he requires only one hand, he uses the arm operated upon, as it is the right one.\*

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\* I sent a request by this patient to Dr Taylor to write me particularly as to the boy's state, and received the following account. I may remark that the imperfect mobility of the limb was owing to the patient's obstinacy in neglecting to exercise it during the cure.—“Auchtermuchty, 28th July 1830.—DEAR SIR,—I am happy to be able to state respecting the boy James Page, on whose elbow you operated in the Surgical Hospital last winter, that his general health is quite good—that his elbow is free from pain, and about the same thickness as the other—that, though the wound cicatrized very slowly, it is now, and has been for some time, perfectly whole,—that his use of the hand seems to be not in the least impaired; and, accordingly he employs it (being his right hand) for ordinary purposes which do not require much motion of the elbow-joint,—that he seems to have the same strength in the arm operated on as in the other, for when he has any thing of considerable weight to carry,—for instance, as much water as he can bring in a pitcher, he does it with his right arm,—and that, though, as you must be aware from the state in which he left the Hospital,

*Caries of Ankle-Joint.*—William Whitelaw, æt. 19, from Cupar Angus, recommended by Dr Rogers, was admitted on the 21st of May. The left ankle is much swelled, red, and painful. On the outer side there is a distinct fluctuation. There are two openings over each malleolus, through which a probe passes readily into the joint, where the surface of the bones is bare and rough. The leg of the same side is much emaciated. His appearance indicates great and continued suffering.

Ten weeks ago, when leaping a ditch, he strained his foot. When he came home it swelled, and was very painful: the swelling never subsided. He has had two blisters applied without any advantage.

The abscess over the external ankle opened the day after his admission, and afforded him a little temporary ease; but he still suffered from pain and profuse discharge; and it was evident that it had come to be a question between the loss of his limb and his life.

I amputated the leg on the 31st of May by single flap, and nothing occurred during the cure that seems worthy of notice, except the extreme weakness of the patient, who continued decidedly hectic for several weeks after the operation. He is now restored to health, and proposes soon to return home.

In performing amputation for disease of the foot, it is usually thought proper to amputate at no greater distance from the knee than is sufficient to afford the patient a convenient support for the body, unless he can afford the expence of procuring an artificial limb. It appears to me, however, in all cases desirable to preserve if possible the use of the knee-joint, by retaining a half of the leg, which is quite sufficient for the purpose, since a common wooden leg can be as easily fitted to this stump as to one higher up; and it is needless to add, that the patient can walk, sit, and perform all other ordinary motions much more easily when he possesses the use of the knee-joint than when he does not. George Robertson, whose case is mentioned in the Third Report, came to the Hospital yesterday, at my request, to show how well he could walk with the assistance of a wooden leg, adapted to a stump of this sort. It was constructed by his father, one of Mr Trotter's workmen.

The girl Anne Stewart, I may take this opportunity of men-

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he has but a very limited motion at the elbow, yet he has a little. He usually puts on and takes off his bonnet, and can also use a spoon with his right hand, but for the latter purpose he generally prefers the left. On the whole, he is certainly in a vastly better situation than if he had lost his arm. I believe every one who sees him readily acknowledges that. I have only farther to join with his parents and friends in expressing my hearty gratitude to you for the service you have so kindly rendered him. It is due also to all concerned to say, that though he must have some not very agreeable recollections and associations, he always speaks with delight of his stay in the Hospital. Wishing, &c. I am, Dear Sir, yours truly, J. TAYLOR."

tioning, who had the amputation through the tarsus performed last summer, continues perfectly well, and walks so that no one would suspect that she had suffered any mutilation.

Margaret Hay, æt. 26, was admitted on the 8th of June. Has great oedematous swelling of the left foot and leg. There are small openings over the great and little toe, another over the front of the ankle-joint, and a fourth over the malleolus extenus. Through the two last-mentioned a probe may be passed to the bone at the outer ankle.

She has for several years back been affected with occasional attacks of erysipelas in the left leg, which generally lasted for two or three days, leaving some swelling of the limb. Nine months ago abscesses began to form, of which the sinuses that have been mentioned are the remains. Her health is much reduced, and she is very desirous of being relieved.

I amputated the leg on the 13th. The wound healed very well, but the patient regained strength slowly, and was not dismissed till the 20th of July. She still continues in a weak and unsatisfactory state.

*Amputation at Shoulder-Joint.*—John Williamson, æt. 26, fish-monger's servant, applied at the Hospital in the summer of 1829, on account of an ulcer upon the middle of the right deltoid muscle. It had a very foul malignant appearance, and allowed the probe to pass in various directions to the bone, which, however, could not be felt either bare or rough. He was admitted into the Hospital some time afterwards, as a deep-seated suppuration had pointed near the coracoid process, and it was thought that the bones must be affected. The matter was discharged, and the original sore was freely touched with caustic potash, after which it was dressed with black wash, and healed so nearly that he was dismissed in a state that enabled him to resume his employment. Early this spring he applied again on account of a deep-seated abscess at the elbow, which was opened, and allowed the probe to pass into the substance of the external tuberosity of the humerus. The old sinuses at the shoulder had also become more painful and copious in their discharge. He was re-admitted on the 18th of May, and all means were employed to cure his complaints without having recourse to the summary, but unsatisfactory process of amputation at the shoulder-joint. As all these proved unavailing, I performed this operation on the 2d of July, by making two semilunar incisions, commencing at the acromion process, and meeting below at the inferior margin of the axilla. Sir George Ballingall completely controlled the hemorrhage, by pressing up on the subclavian artery above the clavicle. The axillary artery and two smaller vessels were tied, after which the edges of the

wound were stitched together. The patient made no particular complaint after the operation. On the 12th day he requested permission to visit his friends at home, and on the 20th he was dismissed.

On account of the state of the soft parts I preferred the method of operating above described to that of Lisfranc, which is certainly much quicker and easier both for the patient and surgeon.

*Osteo-Sarcoma of Tibia.*—Magnus Linkater, æt. 23, from Wick, Caithness, recommended by Mr Henderson of Wick, entered the Hospital on the 29th of May, on account of a tumour of the right leg. The tumour commenced immediately below the knee, and seemed to engage the tibia, which, at this part, felt more than twice as thick as usual. It caused a projection on the outer side of the limb between the tibia and fibula; it could be felt ascending into the popliteal space, and descended under the calf of the leg, so as to stretch the gastrocnemii muscles. The consistence of the tumour was unequal, generally soft, and in some places conveying the feeling of fluctuation, but in others as hard and unyielding as if composed of cartilage.

He stated that nine months previously to the time of admission, after being much exposed to cold and wet in the course of his employment as a cooper, he observed a small swelling about two inches below the tuberosity of the tibia; it was at first not painful, but shortly afterwards became so, and his sufferings have been increasing progressively ever since. He is a tall stout-looking young man, of a sanguine complexion.

As the swelling evidently depended upon a morbid growth of the bone, I saw no remedy but amputation, and performed the operation by double flap on the 3d of June. He was dismissed on the 17th of July, having remained longer than it was necessary, waiting for a vessel to convey him home.

The limb, when dissected, presented a most beautiful and characteristic specimen of the true medullary sarcoma originating from the medulla of the tibia, passing through a round aperture in its posterior wall, and then expanding itself in all directions so as to occasion the tumour which appeared externally. It is preserved in the Museum attached to the Hospital, in which I may observe, all the preparations that have been mentioned are preserved, and may be seen by any gentleman who feels interested in them.

*Fractures.*—Of these 18 cases have occurred, viz.

Ilium	2	Fibula	1	Ossa nasi	1
Femur	1	Clavicle	3	Ribs	2
Patella	2	Humerus	2		—
Tibia	3	Ulna	1		18

Both the fractures of the ilium occurred within a few days of each other, in men about the same age, viz. between 50 and 60, were situated near the crest; were caused by direct violence, viz. the one by the kick of a horse, and the other by a fall on the side; and were treated by the same means, viz. the application of a spica bandage, under which they soon got well.

The fractured femur, which was associated with a fractured patella, happened to Nancy Baker, æt. 28, who fell from a window in Leith three stories high. There was no separation between the fragments of the patella. The fracture of the femur was treated by means of the long splint, with the facility and success uniformly experienced from this simple apparatus.

The three cases of fractured tibia derive interest from the great number, viz. 10, already treated in the Surgical Hospital, in which this bone was broken alone.

*Dislocations.*—Of these the most interesting was that of John Meiklejohn, æt. 18, who applied at the Hospital on the 11th of June on account of an injury of the elbow, which he had sustained the preceding evening from falling off the new Rotunda on the Mound, in the construction of which he was employed. The limb was much swelled, discoloured, and painful; it did not admit of extension, but allowed pretty free flexion without any catch or crepitation. There was a hollow below the external condyle, where the radius usually lies, and the head of this bone could be felt rolling between the internal condyle and coronoid process of the ulna when the hand was rotated.

Though there was not here the symptom which is usually considered the most constant and characteristic of dislocation of the radius forwards, viz. impeded flexion, with a sudden catch in attempting to perform it, owing to the head of the radius striking against the humerus, it was evident that this dislocation existed, and I therefore proceeded to reduce it, by causing the hand to be extended while I pressed on the displaced head of the bone, and thus readily returned it to its proper situation.

*Whitlow.*—Of the very great number of whitlows which came under treatment and were cured by free incision, I think it unnecessary to mention any but that of Francis Wylie, æt. 3, who applied on the 3d of July for a very severe whitlow of the middle finger, as I do not recollect of ever meeting with the disease at so early a period of life.

*Extirpation of Testicle.*—William Lee, æt. 35, from Leith, was admitted on the 5th of June. The left testicle is enlarged and very hard; the integuments adhere to it, and there are three openings on the front of the scrotum, which afford a thin

discharge, and allow a probe to pass into the substance of the testicle; the chord and vessels, though somewhat enlarged, appear to be sound. The right testicle is also a little enlarged; there is some fluid in its tunica vaginalis; and there is a circumscribed hydrocele of the chord about the size of a small egg.

Two years ago both his testicles were swelled for four weeks. The swelling went away of itself, but returned nine months afterwards in both testicles, without pain or redness. They continued in this state till a month ago, when the left testicle inflamed and opened. A few days afterwards two other openings formed.

Having examined the urethra, and ascertained that there was no stricture or other source of irritation connected with it to account for the disease, I dilated the sinuses by converting the three openings into one, and applied a wash. The appearance of the sore became worse and worse, and it was now evident that the gland had suffered such disorganization as to render its extirpation a matter of no regret to the patient. I performed the operation on the 15th, and found that the small portion of testicle remaining was converted into a structure resembling that of cystic sarcoma.

During the operation we had an opportunity of seeing the two hydroceles of the other side, in the chord and tunica vaginalis. The wound healed very satisfactorily, the remaining testicle contracted to its natural size, and the hydroceles gradually disappeared. He was dismissed cured on the 6th of July.

*Hydrocele and Enlargement of Testicle.*—“ Francis Halliday, æt. 23, was admitted on the 29th June, on account of a large pyriform swelling of the left side of the scrotum. There is a distinct fluctuation felt in it. The left testicle is much enlarged and painful when pressed. He also complains of shooting pains in the small of his back.

“ Eighteen months ago he received a kick from a horse on the scrotum. It swelled very much after the accident, but fell very nearly to its natural size on the application of sugar of lead lotion. In consequence of riding much on horseback the swelling returned, and became much larger than before; and he was dismissed on this account from the 72d Regiment last April. In May he entered the Royal Infirmary of this place, where some fluid was twice drawn off from the scrotum, but he left it about the end of the same month, as his complaint seemed to be getting no better. The fluid collected again, and he now felt the left testicle painful.

“ 2d, Mr Syme drew off several ounces of clear fluid. The testicle can now be felt more distinctly enlarged.

" 3d, A blister to be applied to the scrotum.

" 4th, Blister removed. The swelling is now nearly as great as it was before it was punctured. Simple dressing applied.

" 6th, The swelling is not so great to-day, and the pain in his back is better. The blistered surface is suppurating. Acetate of lead wash to be applied to it.

" 8th, The testicle is not nearly so large, but is still a little painful on pressure. His general appearance is much altered for the better.

" 15th, He has now no pain. The testicle is still enlarged, and there is a little fluid in the tunica vaginalis.

" 18th, The testicle is not nearly so large as last report, and the fluid is almost gone.

" 23d, There is still a little fluid in the tunica vaginalis. The testicle is nearly of its natural size. To be dismissed and return in a week, when, if the fluid has again collected, it may be drawn off and wine injected."

*Hydrocele of the Chord.*—Finlay Thomson, æt. 58, from Falkland, whose case is mentioned in the last Report, returned on the 1st of June with the swelling nearly as large as ever. I drew off the fluid, and injected wine with an equal proportion of water, which on this occasion was allowed to remain for fully seven minutes. A proper degree of inflammation followed. Swelling ensued, which gradually subsided, and he was dismissed cured on the 21st of June.

*Wound of Penis.*—Quentin Goodlet, æt. 6, admitted 18th June. Yesterday morning, while playing on the Earthen Mound, he fell over a chain, and in some way or other suffered a wound of the penis, dividing the skin completely round and round about half way between the pubes and glans. The cut edges were nearly an inch distant from each other, and the preputial part of the integuments was drawn together over the point of the penis. The edges of the wound having been brought into contact by means of a number of stitches, cloths wet with cold water were applied.

19th, There is a good deal of inflammation round the wound. Acetate of lead wash to be used.

20th, The skin, which was drawn forwards, is beginning to slough. Hot dressing to be substituted.

22d, The slough has separated, leaving an ulcer on the dorsum penis somewhat larger than a shilling.

24th, Ulcer contracting, but the prepuce is very œdematous. To be punctured.

July 3d, The ulcer is healing under the use of sulphate of zinc wash, but the prepuce is still œdematous, though it has been frequently punctured and carefully bandaged.

15th, OEDEMA nearly gone, wound almost healed. To be discharged.

*Fistula of Prepuce.*—Alexander Campbell applied in April, for an abscess of the prepuce, which had opened naturally by a very small aperture midway between the orifice and neck of the glans. Finding that there was a large cavity between the two layers of the prepuce, I laid it freely open with a bistoury, and then discovered that there was also a very small opening through the internal membrane near its reflexion on the penis. Different metallic washes were applied, and the sore was so much improved that he resumed his employment as a leather-dresser. He returned on the 30th of May, to show that the sinus still continued open and troublesome by the pain and discharge proceeding from it. In these circumstances, I thought it right to divide the prepuce from its orifice backwards to the internal opening which still existed. The healing process then went on favourably, and he was dismissed on the 11th of June.

*Fistula in Perinæo.*—In last Report I mentioned the case of Samuel Pringle, who had laboured long under the complicated sufferings of stricture with fistula, and at the time of his admission, made nearly all his water through the perinæum. When he left the house a few drops of urine still passed through the fistula, since then he has become quite well, and now declares that he feels better in all respects than he has done for twenty years. It is still thought right, however, to pass a bougie occasionally once a month or so, to prevent relapse, of which there is always more or less chance in such complaints. Indeed, this very man had once before been reported as cured.

William Gibb, æt. 50, recommended by Mr James White, admitted on the 27th July. In the perinæum, on the right side of the raphe, there is much hardness and swelling. There are two openings at this part, by which almost all the urine escapes. The prepuce is drawn back and greatly swelled, especially at its lower part, where there is much induration, and an opening communicating with the urethra. There are three very tight strictures,—one at the neck of the glans, a second between three and four inches from the orifice, and a third, the tightest of the whole, at the bulb. The left testicle is somewhat enlarged and is as hard as bone. He has frequent desire to make water, suffers great pain when doing so, and is greatly exhausted by his sufferings.

Twenty-two years ago, when in the West Indies, he had a running, for which he used a very strong injection, the consequence of which was a very violent inflammation of the urethra throughout its whole extent, and also of the testicles. Ever since, he has suffered from the symptoms of stricture. For the

last two years he has had incontinence of urine, which frequently came away drop by drop. Six months ago the two openings in the perineum appeared, and the urine took its course through them. Seven weeks since, he applied to a practitioner, who introduced a catheter, and allowed it to remain for three days, upon which a violent inflammation ensued, matter formed in the prepuce, and the anterior fistula opened.

Strictures are often attributed to the use of injections, but I believe unjustly. There appears more reason to suppose that they generally result from neglected gleets. This man, however, seems to owe his complaint to such a source;—indeed, his case considerably resembles one that I have heard of, where a gentleman, for whom an injection had been prescribed, by some mistake injected into his inflamed urethra, instead of the weak metallic washes generally employed for the purpose, a fluid preparation of cantharides used for blistering horses. The consequences after the first violence of the symptoms had subsided, were thickening, induration, and contraction of the whole canal. I have in my possession an oesophagus given to me by my friend, Mr Dewar of Dunfermline, which is greatly thickened, hardened, and contracted almost to obliteration from end to end, owing to a solution of carbonate of potass, which was swallowed hastily instead of whisky. The case is related in a former number of this Journal.

*Lithotomy.*—The following case, which lately occurred in my private practice, seems deserving of notice as being very unusual in several respects. A few weeks ago, Dr T. Thomson asked me to see a boy ten years of age, the son of an artist in town. He had been complaining for five years of the usual symptoms of stone, which latterly confined him to the house in the greatest misery. He had been passing small irregular fragments of calcareous matter.

On attempting to introduce a sound proportioned to the usual size of the urethra at his age, I met with an obstruction about three inches from the orifice, which required a good deal of pressure to admit the entrance of a small instrument. I felt a calculus lying in the neck of the bladder, or rather anterior to it. And putting my finger into the rectum, ascertained that this was really its situation. I performed the operation next day in the ordinary way, and extracted a mass of calculous matter the size of a walnut, which seemed to have originally consisted of two nearly equal concretions; one of these was entire, and presented a smooth flattened surface to the other, the external shell of which was broken into fragments similar to those voided previously to the operation. I then

examined the bladder by a sound, and ascertained that it contained no other calculus.

Every thing went on favourably until the urine ceased to flow through the wound, which happened about the end of a fortnight, when he began to complain very nearly as much as before. I concluded that the stricture must now be the cause of his sufferings, and proceeded to cure it by the ordinary process of dilatation. I am now able to pass number 4, and he is free from complaint. I never saw or heard of a stricture in the urethra in so early a period of life, and I rather suspect it was not a consequence of the irritation of the calculus, but the original disease, since his uneasy feelings were distinctly dated by his friends to an inflammatory affection of the penis, which occurred when he was five years of age.

*Fistula in Ano.*—David Watt, æt. 34, a Leith porter, of a full and athletic frame, applied at the Hospital in spring on account of a flat deep-seated chronic abscess of the right hip. It was laid freely open, and, being anxious to return home, he was dismissed as soon as it presented a healing surface, with instructions to apply a wash, and show himself from time to time. He omitted to do this, and did not return until May, when it appeared that all the cavity of the abscess was healed except a small sinus, which ran up along side of the gut, with which, however, it did not communicate. He was admitted on the 30th, and dismissed on the 12th of June nearly quite well, after the septum between the sinus and the gut had been divided in the ordinary way. He has since called to report himself perfectly sound.

James Trainer, æt. 38, from Leith, recommended by Dr Kirk, was admitted on the 25th of June. On the left side of the anus there is an induration of the integuments and subjacent parts, in the centre of which there is an opening which discharges matter. A probe introduced at this aperture passes up a winding sinus, which opens into the gut about an inch from the verge of the anus, at a different part of the circumference. He complains of pain, which prevents him from sitting, and which is particularly distressing when he goes to stool.

Two months ago, he experienced a difficulty in evacuating the rectum, and felt as if there was a lump on the left side of the gut, which occasioned great pain when it was subjected to pressure. Poultices were applied for a fortnight; matter was discharged into the gut, and the pain abated. A few days afterwards, he felt an external swelling, which was poulticed and opened by Dr Kirk, who, recognizing the nature of the case, advised him to repair to the Hospital, where he could have more attention paid to him than at home.

I divided the septum on the 26th, and he was dismissed cured on the 10th of July.

John Burnett, æt. 51, was admitted on the 18th of July on account of a fistula in ano of eight weeks standing. On the 20th, the septum between the sinus and gut was divided, several sinuses undermining the skin round the anus laid open, and the wounds dressed with caddis. For some time after the operation there was a copious thin discharge from the wound; this is now diminishing, and the wound is healing under the application of sulphate of zinc wash.

Helen Cheselden, æt. 24, wife of a soldier of the 4th dragoon guards, recommended by Mr Webster, surgeon of the regiment, was admitted on the 26th July, for a fistula in ano of four years standing. I found the external opening at a considerable distance from the verge of the anus, and the internal aperture much higher up than usual, fully two inches and a-half, so that the thickness of the parts requiring to be divided was very considerable, and rendered it impossible to bring out the point of the bistoury at the anus previous to the division, which almost always can be done, and renders the operation much easier both for the patient and surgeon. It happened that the same day on which I cut this fistula, I was asked by Dr Fife, of Northumberland Street, to operate on a patient of his, a respectable person, about thirty, where the internal opening was still higher up, and the thickness of parts of course still greater. Such exceptions, however, are certainly rare, and the important fact observed by M. Ribes, (see First Report) that the internal opening is seldom more than an inch distant from the verge of the anus, ought to be carefully recollected in the treatment of this disease, together with the no less valuable observation of Foubert and Sabatier, that an internal opening almost always exists.

*Ulcer of the Lip.*—About a fortnight ago I was requested to visit a poor woman at Cannonmills, who was said to labour under an incurable cancer of the face. I found the patient lying in bed; she was a married woman, about 36 years of age, and a most miserable object. She was extremely emaciated, and her countenance exhibited that greenish yellow hue which is usually associated with the worst kinds of malignant disease. Her lower lip and neighbouring part of the right cheek was ulcerated, greatly swelled, and red, much of the lip had been destroyed, and the remaining surface was sloughing, and afforded a copious intolerably foetid discharge. She had had frequent profuse hemorrhage; the glands under the jaw were much enlarged.

“ Eight months ago a wart formed on her under lip, to remove

which she used different applications, which, however, only irritated it and made it worse. Three months ago it was about the size of a sixpence, when she applied to a surgeon, who applied caustic daily, till it growing larger he proposed to excise it, when she left him."

I advised her to be taken to the Hospital, that we might examine her case more accurately, and determine if any thing could be done.

She was admitted on the 15th of July, and had an acetate of lead wash applied to the ulcerated parts; the effect of this application was very remarkable. Next day the foul discharge almost ceased, the sloughs had separated, the swelling had fallen, and the inflammation was much abated. This amendment continued to increase, and it seemed as if the ulcer would have cicatrized without any further interference; but I thought it right to cut away a portion of the lip which, from the destruction of the neighbouring parts, projected forwards and hung down. She was dismissed at her own desire on the 24th of July, to attend her family. On examining the portion removed, I found traces of the scirrrous structure, and therefore, notwithstanding the favourable promise of the case, felt apprehensive as to its result; and she accordingly returned on the 4th of August, desirous of having the remainder of the ulcer removed. It now presented the characteristic features of cancer, and I did not hesitate to cut it all away.

Helen M'Queen, æt. 70, from Lasswade, recommended by Mr William Wood, was admitted on the 22d of July, on account of a cancer, which occupied a half of the upper lip and two-thirds of the lower one, together with a large portion of the check. It had a firm consistence, and presented an irregular tuberculated surface, with cauliflower-looking excrescences.

As the disease, though extensive, was quite detached, I thought it right to comply with the wishes of herself and friends for its removal, and performed the operation on the 24th of July. I brought the wound together as far as possible, and united the skin to the mucous membrane of what remained. The patient was of weak intellect, and excessively obstinate, so as to be quite unmanageable, and, by constantly persisting in speaking, strained and irritated the parts so as to oppose their union, and delay their subsequent healing by granulation. Nevertheless, the cure went on, on the whole, favourably so far as concerned the local disease; but large purple marks appeared on the skin of both arms, and afforded a bad indication as to the state of her constitution. On the 1st of August, when the wound was just about healed, and I thought of sending her home, she suddenly suffered a smart attack of erysipelas of the face, from which

she recovered under the free use of spirits and water given internally.

*Inguinal Abscess.*—Mrs P. from Orkney, aged 49, was admitted on the 20th of June, on account of a large tumour in the left groin, fully equal to a child's head, and another in the iliac region of the same side, of a still greater size. It was difficult to ascertain the extent and connexions of the latter swelling through the parietes of the abdomen; but it evidently contained a fluid which fluctuated distinctly both in it and the external tumour when pressure was applied. She complained of great uneasiness in the course of the anterior crural nerve. As there was no reason to suspect disease of the vertebræ or hip-joint, I introduced a trocar into the external part of the abscess, and drew off *five pounds* of pus. The wound healed by the first intention, and the patient felt so much relieved, that she insisted upon going home a few days afterwards, and would not wait until the cure could be completed, by taking away the matter which remained, or had re-accumulated.



SIXTH REPORT  
OF  
THE EDINBURGH SURGICAL HOSPITAL,  
FROM AUGUST 1830 TO FEBRUARY 1831.

BY JAMES SYME, Esq.

FELLOW OF THE ROYAL COLLEGE OF SURGEONS LONDON AND EDINBURGH, AND LECTURER ON SURGERY IN EDINBURGH.

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(From the *Edinburgh Medical and Surgical Journal*, No. 107.)

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THE College of Surgeons of Edinburgh having lengthened the course of Clinical Lectures, required as a qualification for obtaining their diploma, to six instead of three months, it has been thought proper to make a corresponding alteration in the period for which the Reports of the Hospital are published.

Since last Report, 925 patients have applied for relief, and 149 have been admitted into the house.

*Fractures.*—Ever since the institution of the Surgical Hospital, it has been greatly resorted to for relief in cases of fracture both by in and out patients.

During the last month alone, when, it is true, such accidents most abound, from the combined effect of intemperance and frosty weather, the following presented themselves.

Lower Jaw,	1	Patella	-	-	1
Clavicle,	2	Tibia and Fibula	-	-	4
Humerus,	3	Fibula	-	-	1
Femur,	3	Metatarsus and Metacarpus			2

It appears that altogether, since the Hospital was opened in May 1829, upwards of 140 cases of fracture have come under treatment. And having thus had a favourable opportunity of observing the circumstances most deserving of attention in the management of these accidents, which can be obtained only in an hospital, and having also made some dissections which tend to throw light on the very interesting and important, though still rather mysterious, question, of the reunion of bones, I think that a part of this Report cannot be better employed than by devoting it to this subject.

Though bones are broken and reunited every day, we hardly ever meet with two surgeons who are agreed as to the process by which their reunion is accomplished. One says that it is ossification of the periosteum; another, that it depends entirely upon effusion from the bones themselves, &c. This diversity of opinion proceeds chiefly from the difficulty of gaining access to the bones while their union is going forwards, so as to ascertain positively the different steps by which it is accomplished; and the best way of putting an end to it is, for every one who meets with an opportunity of making such an examination, to record distinctly and faithfully what he sees. I will endeavour to do this in regard to two cases which lately occurred in the Hospital; but, in the first place, I think it necessary to say a few words respecting the opinions at present entertained on the subject.

The most elaborate and circumstantial detail of the reparation of fractures which we possess, is that contained in the treatise of "Breschet sur la formation du Cal; Paris, 1819." He made many experiments on dogs and pigeons to elucidate the process, and was led to conclude from his observations that it consisted in the following steps. 1<sup>st</sup>, In effusion into the surrounding soft parts, and gradual ossification of a layer of them exterior to the bones; 2<sup>d</sup>, In effusion into the medullary canal, and subsequent ossification of it; 3<sup>d</sup>, The formation of an intermediate substance between the fractured surfaces, which, in course of time, it might be not until months had elapsed, became converted into perfect bone. How far this description is applicable to the changes which take place in the human subject, remains to be proved.

That the bones are not united merely by the ossification of their periosteum, may be proved at once by cutting them through longitudinally, when the ends are found firmly united together, and even the medullary canal filled with osseous matter. If the section, indeed, is made at an early period after the injury has been sustained, the fractured surfaces remain ununited; and hence Duhamel, who, from analogy, had taken up the idea that

ossification of the periosteum effected the reparation just as the deposition of wood from the bark unites the graft of a tree, was confirmed in his error, because he did not extend his observations beyond the fifteenth day.

It is confidently maintained by some, and I myself used to subscribe to the same opinion, that the new bone or callus results entirely from the old one, and is gradually completed through successive stages, in which a gelatinous matter effused from the osseous surfaces becomes more and more firm, then cartilaginous, and at last identical with the tissue from whence it proceeded. Analogy, no doubt, is in favour of this explanation ; and the appearances observed in bones at a considerable distance of time after they have been fractured also tend to support it ; but there are some facts which may be alleged in objection, and, as I think, afford unquestionable evidence against its truth.

It is daily observed, in treating fractures of long bones, such as the tibia and femur, that, notwithstanding the most careful and effectual means are employed to retain the corresponding surfaces *in situ*, they remain moveable for many days, and, indeed, generally for the best part of three weeks, during the whole of which period the crepitation heard or felt by moving the limb is as distinct as immediately after the injury has occurred. The mobility usually ceases very suddenly, and the limb all at once regains such a degree of firmness as to sustain its own weight, or resist any other equivalent force tending to bend it ; but if subjected to more considerable violence at this time, it gives way again at the part originally fractured. When such fractures are dissected within the first two or three weeks of their existence, the ends of the bones are found quite separate and unconnected by any intermediate substance. These facts are quite opposed to the idea, that the uniting process consists entirely in the effusion and ossification of a substance proceeding from the surfaces of the bones, in which case the mobility should diminish gradually, and flexibility continue long after perfect mobility had ceased, before the establishment of perfect rigidity.

Case 1.—Catherine Adams, æt. 52, was admitted on the 12th of January, soon after sustaining a fracture of the right thigh-bone in its lower third by falling on her side. Pasteboard splints were applied to keep the limb steady, and then by means of the long splint of Desault, extension was effected, so as to prevent retraction of the broken surfaces, which were very oblique. Every thing appeared to be doing well until the 23d of January, when she had a long and severe rigor, and afterwards complained of general uneasiness, with the other usual symptoms of fever. On the following day, her tongue was

brown, and hard ; her pulse frequent, but weak ; and her appearance upon the whole extremely unpromising. Thinking that she would not bear bleeding, I desired that she should have her bowels freely opened by injections, and afterwards take small doses of an antimonial solution. On the 25th, she complained of her throat being very sore, and her respiration was performed with the peculiar sound which indicates oedema of the glottis. Though this symptom was very distinctly marked, it did not seem to warrant tracheotomy, as there was no indication of any severe degree of obstruction in the breathing, and the patient appeared to be sinking independently of this local disease. I therefore directed blisters to be applied to the throat, and stimulants to be given frequently. She died next day.

On dissection, the fracture was found to extend obliquely from near the middle of the bone down to the external condyle. The muscular fibres and cellular substance in the neighbourhood of the injury were altered in colour as well as consistence, by the effusion of gelatinous matter into their texture. A kind of bag or capsule was thus formed, embracing the whole extent of broken surfaces, and containing two or three ounces of fluid blood. The parietes composing it were in some parts connected to the very edge of the bone, but in others they became adherent to it at a distance of an inch or more from the extremity, leaving a space to this extent uncovered, and apparently denuded of periosteum. When carefully examined, this exposed portion was ascertained to be covered by a thin layer of gelatinous substance, which did not possess the toughness or other characters of a membrane ; and the respective surfaces of the bone had a covering of the same kind. The medullary membrane was very vascular, and more distended than usual.

In examining the structure of this bag, I endeavoured to ascertain which of the natural tissues entered into its formation, and in what parts of it, if any, ossification had commenced. On tracing the periosteum from the sound bone, I found that where the bag adhered, that membrane became thick, and evidently continuous with its walls. It seemed probable that where the membrane had been stripped off the bone, as already mentioned, it might assist to form, in some small part, the sac in question ; the great extent of which, however, was evidently constituted by the neighbouring tissues, whatever they happened to be, muscle, tendon, fat, or cellular substance, all being reduced to the same appearance internally, by vascularity of the surface, and the same consistence, by the interstitial effusion of organizable matter.

On introducing my finger into the bag, so as to feel if there were any indications of ossification, I perceived some small grains or specks of bone, which, when minutely examined, pre-

sented a stellated appearance, and were ascertained to lie in the substance of the capsular membrane. When examined in the same way near its connection with the bone, it was found to contain much larger masses possessing osseous firmness; in order to ascertain the precise seat and origin of which, I carefully dissected the membrane where they existed, and then found that they lay completely imbedded within it, having a covering from it on both sides; also that they did not adhere to the bone, being separated from it by a thin layer of the membrane, so as to admit of a slight degree of motion; but at these parts, the shaft itself had begun to shoot out a growth of new bone.

Case 2.—Mary Donaldson, a poor emaciated old woman, 70 years of age, was admitted on the 27th of September, on account of a compound fracture of the left leg close to the ankle. Both the tibia and fibula were shattered into many fragments, and there was a wound over the latter bone extending down to it. Pasteboard splints were applied, the limb being laid on its outer side with the knee bent; but the patient proved so unmanageable and undocile in favouring the maintenance of steadiness in this position, that I was obliged to have recourse to Macintyre's inclined plane, which answered the purpose perfectly. She made no complaint afterwards, and all her functions were performed in a natural manner. For nearly three weeks crepitus could be distinctly felt when the limb was moved, but then the bones united, the wound healed, and on the 25th of October the cure seemed to be complete. The splints were then removed, and a simple roller applied. On the 5th of November, she was dismissed with the limb perfectly straight.

About ten days afterwards, I was much surprised to learn that she had died in consequence of some internal disease, and having procured permission to dissect the limb that had been fractured, obtained possession of the bones for their more careful examination. When divested of their muscular coverings, they presented an appearance hardly differing from that naturally belonging to them. All the pieces into which they had been broken were firmly united to each other and to their shafts, and were covered with a periosteum of usual consistence. On closer examination, the interstices between these portions were found to be occupied by a soft bloody gelatinous substance, to ascertain the precise extent of which the preparation was macerated. When all the interstitial matter had been thus separated, it was seen that the united fragments of the tibia, which were thirteen in number, constituted merely a skeleton, so to speak of the cylinder, and that the central cavity remained entirely vacant. On examining the internal surface of this imperfect

shell, it was evident that an ossific process had been going on over the whole of it, and I have no doubt, that, if the patient had lived some months longer, the bones would have become completely solid. The fibula presented similar appearances, though on a smaller scale, and the process of reunion was more nearly perfected. There is in my possession the preparation of a thigh-bone which was fractured through the neck and trochanters, and was treated by my friend Mr George White. The patient died two months after the accident from some other cause. It now appears, the bone having been macerated, that all the broken portions are firmly united together at the edges, but that all their internal surfaces remain perfectly distinct and separate. The appearance, in short, is very nearly the same, and, I believe, would also have terminated in compact ossification, if the necessary time had been afforded.

I will take the first opportunity of returning to this subject, and endeavour to elucidate it farther. In the meantime, it may not be improper to remark, that the delay which would appear to occur before the broken surfaces of the bones are united, affords no reason or excuse for the practice that is sometimes recommended, of deferring the use of any means to keep the limb in proper position, until ten or twelve days have elapsed after the accident. The first step in the process of reparation seems to be thickening of the surface presented by the surrounding tissues, from effusion into them ; and as this, we have reason to believe, is commenced immediately, without a day's delay, if the surgeon defers setting the bones, he will not only lose the assistance thus afforded in preventing their displacement, but also run the risk of allowing the broken extremities to become so far fixed in the distorted situations into which they have been driven by the contraction of the muscles, or the weight of the limb, as to prevent their perfect adjustment by any force which he has it in his power to employ.

*Fracture of the Thigh.*—There cannot be any doubt, I think, that this accident is most effectually treated by means of pasteboard splints on each side of the thigh, to keep the limb steady, and a long wooden one to make extension. As the muscles of the thigh cannot be relaxed both before and behind at the same time by any position, it is necessary to counteract the retraction which they cause, by the employment of some mechanical extending power ; and the simple long splint of Desault effects this completely ; the modifications of Boyer and others merely impede its operation. There are some cases that admit of no other treatment ; as, for instance, the one mentioned in the former report of a woman, who, from falling out of a window three stories high, fractured both the patella and

the femur. On the other hand, it must be allowed, that sometimes there occur cases in which the straight position is inadmissible. I have related one instance of this in the third Report, in the case of a man who had a stiff and bent knee-joint, and may now add another.

Case 3.—Andrew Brown, æt. 44, recommended by Dr Combe of Leith, was admitted on the 25th of September, on account of an oblique fracture of the right thigh-bone, close above the joint. Having had the limb amputated below the knee in India many years ago, he wore a wooden leg, and, happening to make a false step in going down a stair, fell upon his side, so as to make the short end of the machine press on the inner side of the thigh, and fracture the bone, as has just been mentioned.

There was a good deal of distortion, from the lower part of the bone being retracted by the muscles; but we succeeded in keeping it straight by means of pasteboard splints.

*Fracture of the Patella.*—In this case reunion is opposed by the four following circumstances, 1<sup>st</sup>, The difficulty of retaining the broken surfaces in contact; 2<sup>d</sup>, The absence of vascular parts, or indeed any parts at all on the inner side of the bone, to throw out an effusion of organizable matter for connecting the fragments in the first instance, before they are joined together by their own process of ossification; 3<sup>d</sup>, The presence of the fluid of the joint, which is secreted in greatly increased quantity by the irritation of the injury; 4<sup>th</sup>, The spongy texture of the bone concerned, which is observed to have less power of ossific effusion than the dense portions of the same tissue.

Four cases of this accident have presented themselves to our observation. The first of these was that of a man, æt. 35, from Rothsay, who applied at the Hospital on the 13th of June, immediately after having fractured the patella transversely by falling from a cart. The proper bandages were applied; but he refused to remain in the house, being anxious to return home without delay. The second was of a year or more standing, and the patient, a young woman, came from the neighbourhood of Melrose, anxious to have some operation performed for her relief. On examination, it appeared that the fragments remained perfectly moveable, so that when the limb was extended, they could be placed completely in contact, and upon its being bent, separated to the extent of three or four inches. The limb was consequently very much weakened, and she was therefore desirous of relief. I recommended her to procure a bandage, which should have the effect of retaining the two portions of the patella completely, or nearly, in contact, and this was effected by means of two broad circular collars of leather, which being laced tight round the thigh, were then drawn

together by straps at the sides of the knee and patella. She went away very well pleased with the improvement in her condition, and I have heard nothing of her since. The third was also an old case, the patient being Duncan Campbell, æt. 53, from Leith, who was admitted into the Hospital on the 30th of December for fracture of both bones of the leg. The knee presented a very unusual appearance, and upon examination it was found, that there existed not only an old fracture of the patella, but also a subluxation of the joint outwards. These injuries were stated to have been sustained nearly forty years ago in leaping over a high wooden fence. The fragments of the patella were several inches distant from each other, and greatly increased in size ; indeed, the upper one was nearly three times as large as it ought to have been. Notwithstanding all this, he had been able to discharge the duties of an infantry soldier for thirty years.

The fourth case was that of George Sinclair, æt. 37, who was admitted on the 1st of January, on account of a transverse fracture of his left patella, which he had sustained the same evening by falling down a stair. The fragments were considerably distant, and a large effusion had taken place into the cavity of the joint. The limb was kept straight, and a pillow placed under the foot, to relax still farther the *rectus* muscle. Discutient lotions were applied to the knee, and circular bandages above and below the patella, with connecting bands on each side of it. The effused fluid was very gradually absorbed, and it was long before the fragments could be brought together. The patient is still in the house, but will soon, I trust, be discharged with little imperfection of the limb.

*Fracture of the Scapula.*—In one of the former Reports, I related two cases of fractured ileum, and have now to give an instance of the still rarer accident of fracture of the body of the scapula.

Case 4.—John Kevlin, æt. 45, admitted on the 8th of December, soon after suffering the following accident : As he was carrying a heavy stone, in a handbarrow, across the sunk area of a house which was building, the wooden gangway broke, and he, with his companion, were precipitated to the bottom. He being before fell first, and was followed by the stone, which struck him on the back.

Though not prepared to expect a fracture of the body of the scapula, an accident which I had never seen, I at once recognized the existence of such an injury. The lower portion was drawn upwards, and projected outwards by the action of the *teretes* muscles, together with the *latissimus dorsi*. I put a cushion of tow in the axilla, another over the lower part

of the scapula, and then applied a spica bandage, under which treatment the patient felt quite easy, and was dismissed free from uneasiness or deformity on the 2d of January.

*Fracture of the Lower Jaw.*—The lower jaw is usually broken opposite the bicuspid teeth; and Boyer asserts, that it is never fractured at the symphysis. The following case affords nearly, if not altogether, an exception to this rule.

Case 5.—Thomas Reid, æt. 28, received a blow on the lower jaw in the evening of the 12th of January, and in consequence sustained a fracture of the bone, which commenced below the central incisors, and proceeded obliquely backwards on the right side. No means were employed but a simple bandage passing under the chin, and secured over the vertex, and he is now about well. The interposition of any foreign substance between the teeth in such cases is equally useless and annoying; the shape of the respective surfaces presented by the grinders effectually prevents any lateral motion, and the fluid food on which the patient must of course subsist during the cure can be readily imbibed through the interstices of the teeth.

*Dislocations.*—In an old woman who died in the Hospital last August, we had an opportunity of dissecting a dislocation of the shoulder-joint, which had remained unreduced for evidently a very long period; the long head of the *biceps* adhered to the groove in which it lies. The lower part of the glenoid cavity had been broken off, and still remained loose, being nourished through its adhesions to the capsule, and a new articulating surface had been formed on the inner side of the neck of the scapula. Four recent cases of dislocated shoulder-joint presented nothing remarkable. One of lateral displacement of the ulna reduced by Mr Nicholson, the house surgeon, was not seen by myself; I can therefore say nothing about it; but think the following case, though it may appear trivial, ought to be mentioned, as I believe it to be of rare occurrence.

Case 6.—Peter Granger, æt. 12, when carrying a pitcher of water fell upon his left hand, and dislocated the first phalanx of his fore-finger from the metacarpal bone backwards. The extremity of the metacarpal bone was felt very distinctly in the palm of the hand, while the finger was bent up and could with difficulty be brought into a straight line with the metacarpus. The hand being held steady, I extended the finger with one hand, and at the same time endeavoured to squeeze the bones into their proper position, which was soon effected with moderate force.

*Excision of Joints.*—Since last Report, I have cut out four other diseased elbow-joints, making in all fourteen cases of this

operation which have occurred to me within the two years which have elapsed since I first performed it. Having already so often and fully detailed all the circumstances of this proceeding, I need now merely notice the peculiarities that were presented by the instances that have just been mentioned.

**Case 7.** —— Walker, a boy of about 8 or 9 years of age, was recommended to my care last August, by Dr Fletcher of Dunkeld, on account of an injury of the left elbow, which he had sustained five weeks previously, in consequence of being dragged a quarter of a mile along the road by a cow, to which he happened to get fastened by a rope. The flesh, as Dr Fletcher expressed it, was ground off the elbow to the bones. The limb afterwards assuming a very bad appearance, it seemed necessary either to amputate the limb or cut out the joint.

Finding the portion of olecranon that remained bare, and the joint open, while the limb was greatly swelled, and the patient's health much impaired, I did not hesitate to cut out the articulation in the usual way. The following letter from Dr Fletcher will show how satisfactory the result has proved.

“ *Dunkeld, 14th December 1830.*”

“ DEAR SIR,—I received yours of the 12th, this morning, and am happy that it has arrived to hasten my doing what I intended to do for the last three or four weeks, viz. to let you know the success of little Walker's case. Until about that time, there was always a slight discharge, sometimes with a scab, sometimes without one; but since then the part has completely dried up; and on examining it to-day, I found the whole surface covered with good sound skin, except one place, about the size of half a sixpence, which has a thin scab upon it, though there is every appearance of its being like the rest in a few days. But while the cure of the wound has been thus successful, the astonishing part of the case is the utility of the arm; its motions are perfect, and it is daily gaining strength; the degree it possesses already is really surprising. To suppose that it will be equal to the other arm is totally out of the question; but its usefulness is more than I could have expected, and certainly a thousand times greater than that of an unseemly stump. If any thing unfavourable should happen in this case hereafter, I shall be sure to write you. I sincerely trust that nothing will go wrong; but if it should, I am confident the cause ought to be ascribed to constitutional fault, and not to the operation.

“ Every person who attempts a bold and serious operation, such as the excision of joints, must often meet with vexation and disappointment; but you have every reason for congratulation in the case of Walker.—I remain, Dear Sir, yours most truly,

D. FLETCHER.”

Case 8.—In last Report, I mentioned that William Finlay, æt. 28, a farm-servant from Cockpen, had applied at the Hospital on account of a small abscess on the inner side of the arm, a little above the elbow, together with considerable swelling and stiffness of the joint. He was dismissed after having the abscess opened and the cautery applied, but returned on the 26th of August in a much worse state than before.

His arm was greatly swelled, and excessively painful. He was entirely deprived of rest, and could not permit the slightest movement of the limb without suffering excruciating agony. The acuteness of his symptoms becoming somewhat mitigated, I performed the operation on the 6th of September, in compliance with his urgent and daily solicitation. The joint was found to be very extensively diseased, the articulating cartilage being entirely detached, except at some part of its edges.

The patient made an excellent recovery, and was dismissed on the 27th of October. He returned lately so much improved in his appearance, that it was difficult to recognize him. The arm is very moveable, and daily increasing in strength.

Case 9.—William Rogers, æt. 13, was brought to me in the beginning of last summer, on account of a diseased elbow, which seemed a very proper subject for excision ; but his parents were dissuaded from acceding to this proposal, by the representation of a practitioner adverse to the operation, who strongly recommended amputation in its stead. As this proposal was still less acceptable than the former, the patient was sent to the country, and placed under the care of a veterinary surgeon. I was asked to see him again about the middle of September, when a great change to the worse was observed. The swelling, instead of being circumscribed and confined to the neighbourhood of the joint, now extended half-way up to the shoulder, and down to the hand. There were numerous sinuses, and, in short, an appearance of greater derangement of the structure than I had ever met with, except in the case of Elizabeth Johnstone, which is related in the first Report. Encouraged by the success experienced in that instance, I nevertheless undertook to perform the operation.

The operation was performed on the 21st of September, and proved even more severe than had been anticipated, owing to the ulna being very extensively diseased. The whole of its spongy structure was filled with gelatinous substance, and I therefore cut it across as low as the commencement of the shaft.

The patient seemed to be doing well for nearly a week ; but he then lost his appetite, and exhibited the usual signs of irritative fever. Up to the 30th, I entertained hopes of him ; but he then began to sink. I then thought it right to give him the

chance afforded by removing the limb. He died the day following.

The result of this case shows that there are limits determined by the extent of the disease, and the constitution of the patient, beyond which the operation cannot be pushed with safety. These limits can be ascertained only by experience; and, therefore, exceptions so rare as the one now mentioned should be regarded as beacons, not to warn us against the operation, but rather to guide us in its safe and advantageous performance.

Case 10.—John Nimmo, æt. 12, was admitted on the 1st of October. This boy had been an inmate of the same institution as the other. His complaint had commenced about the same time, and he also had been urgently advised to submit to amputation. The disease was in the left elbow, and presented nearly the same appearance as Rogers' did when I saw him first. I performed the operation in the usual way, and he made a good recovery. He was dismissed on the 27th of October.

*Partial Amputation of the Foot.*—In the first of these Reports, I detailed the case of a girl Stewart, who had laboured under caries of the tarsal heads of the metatarsal bones for upwards of a year, and had been advised to submit to amputation of the leg, but who was completely relieved by having part of the foot merely removed, according to the plan of Chopart. The result of this case has proved highly satisfactory. The patient having got a very simply constructed artificial foot, she can walk with perfect ease to herself, and hardly any perceptible difference in her gait from that of other people. The apprehension usually entertained in regard to this operation, that the extensor muscles of the heel being unopposed by the flexors, the attachments of which are necessarily all divided, must draw it up, and point the face of the stump to the ground, has, as I expected, turned out to be entirely groundless. The *tibialis anticus* and *extensors* of the toes soon acquired new connections, and enabled the patient not only to prevent the face of the stump from being drawn down, but to bend it upwards at her pleasure. I therefore did not hesitate to resort to the operation in the following case.

Case 11.—William Gemble, æt. 24, a tall, thin, unhealthy-looking young man, of a dark complexion, and dissipated appearance, entered the Hospital on the 31st of August, on account of pain and swelling of the foot. The swelling existed chiefly at the inner or tibial side of the instep, where there was an obscure sense of fluctuation, but also extended across, though not so prominently, to the outer edge. He had observed pain and enlargement for eighteen months, and had used blisters and leeches, but did not experience any considerable pain in it

until a few weeks before the time of his admission, since which, he had been confined to the house, and prevented from following his employment, which was that of a printer.

In order to check the progress of the disease, I applied the actual cautery, but without success. An abscess formed at the inner side of the foot, and when it was opened, the tarsal bones were found to be extensively diseased. In these circumstances, I proposed the partial amputation of the foot, but could not prevail upon the patient to submit. He returned home, but came back again on the 1st of September, with his mind made up to the operation.

The foot now presented a much more formidable appearance. Abscesses had opened in the sole, as well as at other parts, and the swelling was greatly increased; still, however, there was no indication that the ankle-joint, or the one between the *astragalus* and *os calcis* was affected, and I therefore performed the operation, as in Stewart's case. The cartilaginous surfaces were found entire, but, as they were somewhat discoloured, I thought it right to cut them off with the pliers.

The patient did pretty well for two days, with the exception of complaining of pain in the stump, and having a very frequent pulse. A very profuse bleeding then ensued, and was arrested by the application of cold and pressure. Next day there was a return of the hemorrhage, and the stump was not only much inflamed, but beginning to slough at the edge of the flap. I carefully extracted all the clots, and introduced a piece caddis between the *os calcis* and flap, which was the part whence the blood issued; graduated compresses and a bandage were then applied, and the case proceeded favourably afterwards, and, though the patient made a tedious recovery, he ultimately got quite well, and was dismissed on the 13th of November.

*Urinary Calculus.*—In last Report, I mentioned a case of stone that had occurred in private practice, in which I extracted two large stones from a sac formed by dilatation of the membranous part of the urethra. Some uneasiness continued after the operation, which was referred to a stricture of the urethra that had existed previously to it; and from the great relief which followed the introduction of bougies, gradually increased in size, I fully expected that the cure would soon be rendered complete. Finding, however, after the urethra had been dilated to its natural width, that the symptoms were not entirely removed, I passed an instrument into the bladder, and detected a calculus there. The reason of not making this discovery sooner, was, that the stricture being seated in the anterior part of the canal, I had never introduced the bougies farther, from

apprehension of disturbing the healing process in the wound of the urethra. Having proposed to remove this remaining portion of the disease, and meeting with great reluctance on the part of one of the parents, I strongly urged the propriety of allowing it to be done, either by myself, or if, as was natural perhaps, inability of understanding the peculiarities of the case occasioned any distrust in me, by another surgeon, who, I understood, had called and inquired for the patient. My remonstrances proved fruitless, and for many months nothing was done; but I am informed that the stone has been since extracted.

This case shows, in the first place, how careful one ought to be in removing stones from the urethra, near the neck of the bladder, to ascertain, at the time, whether or no there are any in the bladder itself. For though it may be of little consequence to the patient in respect either to pain or danger, whether they be taken away together or separately, he will, in the latter case, have all the horrors of two operations, and be ready to listen to any suggestions calling the skill of the surgeon into question.

It is impossible, in such cases, to ascertain the contents of the bladder previously to the operation; because the entrance to it is obstructed by the calculus, and after it is removed, so as to admit an instrument, the truth may still not be discovered, since, as every one knows, a stone frequently escapes detection by the sound at the first trial. The safest plan, therefore, will probably be to divide the prostate so as to admit the finger, and facilitate a complete scrutiny into every corner of the bladder.

Another important fact which it illustrates, is the comparatively small uneasiness generally occasioned by stone in young subjects. This boy, after the concretions were removed from his urethra, walked about as usual, slept undisturbed during the night, and made no complaint, except when he voided his urine. It was this extreme mildness of his symptoms that led me to attribute them entirely to the stricture.

Case 12.—*Norman Wilson, aet. 3,* recommended by Dr Abercromby, was admitted on the 14th of September, on account of stone, under the symptoms of which he had laboured more than a year.

On introducing a sound, I felt a calculus lying in the prostatic portion of the urethra, and removed it. To avoid a similar mistake to the one just mentioned, I then dilated the neck of the bladder with a bistoury, and introduced my finger, so as to ascertain positively that there was no concretion in the blad-

der. The boy made a good recovery, and was dismissed quite well twelve days after the operation.

Much about the same time with this last patient, I operated on a young gentleman in Leith, and removed two stones from the bladder with good success. I mention this case merely as it tends to show, in conjunction with the others related in these Reports, that urinary calculus is not so rare in this part of the country as has been alleged. The one I have next to mention is the twelfth that came under my care during the same number of months.

Case 13.—Mr R. æt. 60, from Kelso, entered the hospital on the 26th of December to be operated on for stone in the bladder. He was a man of short stature, but naturally of very stout muscular frame, though now, from great suffering, both of body and mind, reduced to the mere shadow of himself. For nearly three years he had suffered all the symptoms of stone in a degree of extraordinary severity. His cries of agony were almost incessant, both day and night; and to mitigate the intensity of his sufferings, he had so habituated himself to the use of opium as to take latterly sixty-two grains for his daily dose.

I performed the operation on Monday the 21st, and extracted without difficulty a small oval stone about the size of a pigeon's egg. A serious question then presented itself, viz. what allowance of opium should be afforded him? As the irritation which had rendered it necessary was now removed, it might, if continued to the full extent previously used, prove hurtful, while a sudden discontinuance of the accustomed stimulus would be no less likely to do harm. In these circumstances, we thought the safest plan was to leave the patient to the guidance of his own feelings, proceeding upon which, he took each of the first six days from six to eight hundred drops of laudanum. During this period he did as well as could be wished. His pulse never exceeded 62. He recovered his appetite. His urine passed freely from the tube, which was withdrawn on the third day, after which he began to retain it and discharge considerable portions at a time. His bowels were regularly opened by injections, which for a long while had been indispensable to him. I considered him perfectly safe, and he began to talk of the probable time of his return home.

On Saturday, Sir George Ballingall and I thought that he might safely begin to diminish his dose of laudanum. In the evening, I received a message that he was not so well, and on going to the Hospital, found him complaining of exhaustion and general uneasiness, his pulse had increased to 80, and his tongue

was dry. As he had taken no laudanum since morning, I prescribed two teaspoonfuls to be taken immediately, and to be repeated every third or fourth hour during the night. On Sunday he was better, but his pulse kept up, and there was a slight degree of mucous rattle in the chest. I directed half the quantity of antimonial wine to be given with his laudanum, and a large blister to be applied to the chest. Dr Abercromby saw him in the evening, and did not think any other measures necessary.

On Monday, Tuesday, and Wednesday, he continued in much the same state, but on the whole became progressively worse. He lost his appetite; his tongue became drier; he complained of great weakness and general uneasiness; and though he expectorated mucus in very large quantity, it seemed to be accumulating in the lungs. He continued the antimony, and had another blister applied to the chest.

On Wednesday, about mid-day, he suddenly complained of a violent pain in the left lumbar region, half way between the spinous process of the ilium and the false ribs; it was not increased by pressure, but remained incessant and excruciating; he cried most piteously, without intermission, from this time forwards, until Thursday evening, when he died.

On dissection, we found the lungs so gorged with mucus that they did not collapse when the chest was opened; they were white and firm, and when divided, still retained their form and appearance. In the abdomen, there was not the slightest appearance of inflammation or other morbid condition, except that the colon, from the middle of its left or descending portion downwards, was extremely contracted, though elsewhere more than usually dilated. This contraction commenced precisely at the part to which the agonizing pain had been referred; but what share it had in its production, I am at a loss to conceive or explain. All the parts concerned in the operation were in the most satisfactory state; there was not the slightest trace of inflammation or effusion in the cellular substance surrounding the neck of the bladder; the mucous coat presented its natural colour; the wound was much contracted in its size throughout, it gradually diminished in width from its external orifice inwards, and was everywhere perfectly smooth and even on its surface.

The fatal result in this case may, I think, with most probability, be ascribed to the effect of suddenly removing a source of extreme irritation in a very irritable system. In ordinary cases of stone, this diminution of irritation constitutes the patient's safety, by counterbalancing the irritating tendency of the operation. But the irritation in this instance being of extraor-

dinary intensity, while the operation, from the small size of the stone, was gently and easily performed, it is conceivable that the actions of the system might, from the cause alleged, fall into disorder, and produce the results that have been described. At all events, I have faithfully related the case, and the practical reader may explain it as he thinks best.

Case 14.—Alexander Mucklereigh, æt. 12, recommended by Dr Cunningham, was admitted on the 28th of January, on account of retention of urine, owing to a calculus in the urethra. He had suffered from urinary complaints for many months, but three or four weeks ago began to experience great difficulty in evacuating the bladder, and at length suffered a complete retention, which had been relieved daily by the introduction of a catheter. A calculus was felt at the bulb, which effectually valved the passage when pushed forwards by the stream of urine, but readily retired backwards under the pressure of the instrument, so as to leave it free.

I could feel the calculus through the integuments a little behind the scrotum, but being unwilling to cut upon it here, where the parts were thick, and from their laxity favourable to the effusion both of blood and urine, I dilated the passage after the manner of the Egyptians, described by Prosper Alpinus; that is, by blowing into it with a tube, having previously, to facilitate the passage of the stone, introduced a little oil. By these means, and making pressure behind the calculus, I brought it forward to the anterior part of the scrotum; but not being able to make it advance any farther, and there being no longer any objection to removing it by incision, I did so, and extracted an oval concretion, about the size of a small plumb-stone. The boy made no complaint afterwards. The first time he made water, a little passed through the wound, but none escaped again, and he was dismissed quite well in two or three days.

Case 15.—*Fistula in Perinæo.*—Walter Montgomery, æt 31, recommended by Dr Morison of Dalkeith, was admitted on the 3d of November, on account of a *fistula in perinæo*. I found a stricture at the bulb, and cured it in the usual way, by introducing steel bougies. The urine very soon ceased to pass through the preternatural aperture, except to the extent of a few drops, and issued from the urethra in a full stream; but the external opening, which was much wider than it is in general, showed no disposition to heal. I therefore dilated it freely by incision, and afterwards applied caustic, without any perceptible benefit. The patient then began all at once to cough and spit, with a frequent pulse,—in short, to show all the symptoms of confirmed and rapid phthisis. Though not aware that a

connection between *fistula in perinæo* with phthisical complaints is observed similar to that which is supposed to exist between *fistula in ano* and this disease, I suspected that, in the case in question, there might be something of the kind. In the course of two or three weeks it gradually healed, and the patient was dismissed on the 28th of December nearly well, with the exception of his pectoral symptoms, which continued much the same.

Case 16.—*Hæmatocele*.—William Clew, æt. 40, presented himself on the 23d of August, on account of a large swelling of the scrotum, measuring fifteen inches in circumference, and nine in length, which on examination seemed to depend on an enlargement of the contents of the right *tunica vaginalis*. The surface of the tumour was smooth, shining, and of a dark-red colour, it felt soft and doughy, and pitted on pressure, particularly at the lower part. The patient complained of great uneasiness from the weight of the swelling, and the pain which it occasioned when subjected to any kind of motion. He stated, that four years ago he was tapped for hydrocele, and that ever since the scrotum had been larger than before, but gave him no trouble, except from its size, until a month previous to the time of his admission, when, after walking a considerable distance one very warm day, he was seized with great swelling and pain, which suffered no abatement. Shortly before he applied at the Hospital, a small abscess had opened at the bottom of the scrotum.

Having every reason to regard the case as one of hæmatocele, but wishing to ascertain the matter beyond a doubt, I introduced a trocar, and drew off a very small quantity of bloody fluid, the canula becoming obstructed with fibrinous-looking clots, I therefore desired the patient to come into the Hospital, and have the necessary operation performed, viz. incision of the sac, and evacuation of its contents. *Vide First Quarterly Report.*

He was admitted on the 29th; but being then in a very weak and feverish state, I felt unwilling to interfere with the disease until he should get into a better state, the more so as he was rather unusually circumstanced in another respect, having six years ago had the operation of tracheotomy performed, and being unable ever since to suffer the opening to be closed, owing to a permanent contraction of the glottis.

On the 1st of September, the tumour opened spontaneously at its lower part, and discharged a large quantity, twelve ounces by computation, of blood and clots. He was then considerably relieved; but as the great bulk of the swelling still remained, I dilated the puncture which had been made by the trocar, and squeezed out more of the clots, the farther issue of which was

then promoted by the application of poultices. The scrotum gradually contracted, and he was dismissed on the 1st of October.

*Cancerous Sores of the Face.*—It must have been remarked by every practical reader, that when cancerous sores of the face are freely removed by the knife, the wound generally heals very quickly and satisfactorily. This is probably owing to the laxity of the surrounding integuments, as the subjects of such operations are mostly people advanced in life, favouring the contracting effect of the granulating process. Very great freedom may therefore be used in removing these sores, provided it is ascertained that they can be eradicated.

Case 17.—David M'Donald, æt. 65, presented himself on the 12th of November, for a cancer of the right eye. The conjunctival covering of the ball and both eyelids were engaged in the disease, which also extended upwards over the external part of the eyebrow, and downwards for some distance on the cheek. The complaint commenced twenty years ago, and had been constantly extending its ravages, so as at length to attain the extent which has been described, and render him unable to follow his employment, which was that of a street-porter. As the sore did not adhere to the bone at any part, except the external margin of the orbit, which of course could be easily removed along with it, I undertook the operation, and performed it a few days afterwards.

Having circumscribed the whole morbid surface by a circular incision, I dissected away the cancer from the subjacent parts, so far as it was connected to them merely by the ordinary attachments; but on coming to the external margin of the orbit, I found it necessary to cut away with the pliers all that part of it which bounded the temporal fossa. The whole of the diseased parts, including the eyeball, were then detached, and some pieces of caddis placed upon the wound.

The patient suffered a severe attack of erysipelas of the head and face, but soon recovered from it, and then began to experience benefit from the operation, feeling himself relieved from the burning pain which he had previously suffered in the ulcer. The sore then began to contract, and continued to do so gradually, until a part not so large as a shilling remained to be cicatrized. He was dismissed on the 25th of January much stronger, and looking many years younger, than when he entered the Hospital.

Case 18.—John Niel, æt. 41, from Cupar, was admitted into the Hospital on the 20th of November, on account of a large ulcer which had destroyed the right half of the nose, and more

than half of both eyelids. The eye was hardly visible, being pushed away to the side by a hard cauliflower-looking excrescence, which sprung from the morbid surface. The probe being introduced, was readily passed on to the ethmoidal cells and other bones in the neighbourhood. The disease had commenced a great many years before, and had very slowly extended itself. Though this tardy progress was favourable to the success of an operation, in so far as it indicated the absence of any very malignant tendency in the disease, I did not think, in all the circumstances of the case, and especially the affection of bones which could not be removed, that an attempt at excision was warranted, and therefore advised the patient to return home.

*Cancer of the Lip.*—Ulcers of the lips are sometimes prevented from healing merely by the motion of the part, or the indirect irritation caused by disorder of the digestive organs, in which cases the application of pressure, so as to keep the lip steady, with some metallic wash, such as the solution of sulphate of zinc or calomel and lime-water, and an alterative course of medicine, are sufficient for the cure. But when the sore is truly cancerous—that is to say, seated in a carcinomatous structure, it is to be regarded as incorrigible, and necessarily requiring removal. This may be done either by removing a triangular portion of the lip like the letter V, and uniting the respective surfaces, or by simply taking away the diseased surface with the scissors, and sewing together the skin and mucous lining of the lip.

Case 19.—Mr Pearson, farmer from Kinrosshire, applied a few weeks ago on account of a small superficial ulcer nearly the size of a sixpence, which had resisted the efforts of his attendants in the country, and made him desirous of some radical remedy. I made him apply a piece of caddis moistened with the black wash, protected by a piece of oil silk externally, so as to prevent it from drying, and supported by a bandage, which prevented the lip from moving. In two or three days he returned home with the sore diminished to half its former size, and promising to be soon completely healed.

Case 20.—Jane Dodds, æt. 50, from Earlston, was admitted on the 12th of December, on account of a superficial ulceration of the lower lip, which extended from nearly the middle of it to the right commissure. Its basis was very hard; and, though in some places it presented an innocent appearance, it exhibited in others the usual characters of cancer. It commenced ten years ago, and never healed. A short while before leaving home, she had been taking mercury for this complaint, and having been exposed to cold during the journey, was suffering at the time of her admission from swelled gums, foetid breath,

and the other symptoms of mercurial action. I therefore postponed operating until the 23d, when she seemed to have quite recovered from this derangement.

I then cut away the whole of the diseased surface, but merely the surface, with curved scissors, since the other mode of procedure, which until lately used to be always followed in such cases, viz. that of taking away a triangular portion of the lip, would have been equally unnecessary and injurious. The edges of the wound united satisfactorily, but afterwards separated, as the patient thought, in consequence of a violent cough with which she at this time became affected, and afterwards assumed the characteristic appearance of a mercurial sore. Sulphate of copper and lotions of other metallic salts, with a bandage, were applied, and she was dismissed quite well on the 13th of January.

Case 21.—William Macfarlane, æt. 50, was admitted on the 11th of October, on account of a cancer of the lip, which had existed for upwards of two years. As it was circumscribed and rather deeply seated, while the lip was full, and could afford to lose a portion of it without inconvenience, I made two incisions obliquely downwards, meeting at their lower end, and including a triangular portion. The respective surfaces were united by the twisted suture. He was dismissed on the 15th.

*Cancer of the Tongue.*—The ligature is usually employed for removing incurable sores of the tongue; but unless the disease is seated very far back, where the hemorrhage, if copious, could not be easily restrained, it is better to use the knife or scissors for the purpose. The operation is thus rendered not only much less painful, but also much more sure in its effect, since a part of the disease is very apt to escape the ligature, however carefully it may have been introduced. If the disease is very deeply rooted, or if there is great tendency in the neighbouring parts to assume the morbid action, even excision will prove unavailing.

Case 21.—Mr M., recommended by Mr Stuart of Kelso, entered the Hospital on the 22d of October, on account of a large ulcerated tumour of the tongue, nearly half of which, both as to length and breadth, was engaged in the disease. It had commenced four months before, and been diminished but not eradicated by the ligature. In order to bring the extent of the disease more completely into view, I removed three of the adjoining teeth, and as it then appeared that the swelling did not descend so deep, or proceed so far back as to render its removal impracticable, I thought it right to make the attempt.

Having seized the diseased mass with a pair of hook-forceps,

a very useful instrument on such occasions, which I brought from Paris some years ago, and may now be found in all the cutlers' shops here, I cut it out with a curved knife. In doing this there was no difficulty experienced in taking it away completely from the tongue, but at the floor of the mouth the tumour was found to have deeper and firmer attachments than we expected. After the bulk of the tumour, therefore, had been removed, I dissected out several smaller portions from this situation, and a few days afterwards applied the actual cautery very freely, to destroy any that might still remain.

The wound assumed a very healing appearance, and the patient returned home on the 3d of November, with good hopes of a perfect cure, though I entertained considerable misgivings on the subject. Not long afterwards Mr Stuart informed me that the disease was threatening to return, and I then inquired particularly whether the morbid appearance was confined to the floor of the mouth, or engaged also the tongue. He replied that the whole surface was equally affected, upon which I abandoned all hopes of arresting the disease by operation, and suggested, as the only means that seemed to afford any chance of benefit, the frequent and free application of caustic.

*Ranula.*—The seat and nature of this disease do not seem to be well ascertained; but the treatment is more determined. A part of the bag ought always to be cut out; and if it is of small size, this generally proves sufficient; but if it is large or of old standing, it is necessary also to introduce a piece of caustic, either potass or nitrate of silver, and touch the inner surface, so as to make it inflame, and either slough or change its secreting action.

*Case 23.—Double Hare-lip, with Malformation of Upper Jaw.*—George Pearson, aged 6, from Stow, was admitted into the Hospital on the 15th of January, on account of a congenital malformation of the lip and jaw. The central part of the jaw, the part apparently corresponding to the intermaxillary bone, projected so as to form a round knob, which bore the two middle incisores, and adhered by a narrow neck to the septum of the nose. On it there lay a small tumour, composed of the integuments which ought to have formed the corresponding portion of the lip. There was no fissure of the palate, but the edges of the lip, which lay on each side of the bony projection, were necessarily at a considerable distance from one another, and not very extensible. Being anxious to preserve, if possible, a complete septum for the nose, which would of course be seriously impaired if the integument resting upon the projection of bone were taken away along with it in the first instance, I resolved to save as

much of this skin as might be required to complete the septum, and endeavour to unite it at the same time with the edge of the lip.

With this view, having dissected off the skin, I removed the projection with cutting-pliers. A profuse hemorrhage then ensued, and rendered some delay necessary; as the arteries which spouted were lodged in the bone, and consequently could not be tied. When the bleeding had subsided sufficiently, I made the edges of the lip raw, by cutting off a slice from each; and here it may be right to remark, that the success of the operation for hare-lip, so far as the shape of the lip is concerned, depends much on the mode in which this is done. The edges of the malformed lip being always convex, it is plain that if the surgeon cuts a slice of the same thickness from the whole of their surface, when they are brought together, the result will be an angle at the point of union. But if he cuts so as to make the slice thin at the ends and thick where the edge of the lip is most convex, the appearance will be more natural. I then united the edges together, and having reduced the portion of integument procured from the central part to a proper size for completing the septum, fixed it in its place with a suture.

The child made no complaint after the operation, and the union was subsequently accomplished, notwithstanding some superficial ulceration, owing to the irritation of the needles, and the strain of the stretched lip; to lessen which, a strip of adhesive plaster was applied, so as to draw the cheeks together. There remained, however, a small opening between the lip and septum, over the part of the bone to which the root of the projection had adhered. The surface of this was granulating; and I have no doubt the aperture would either be obliterated, or, at all events, become so small as to occasion hardly any perceptible difference, so soon as the exposed surface of the bone healed. The boy's father being anxious to return home, took him away on the 2d February, before this could be ascertained.

My friend, Mr Dewar of Dunfermline, has related and represented two cases of this disease in the number of this Journal for July last. Having, in the first of these, been disappointed in obtaining union between the edges of the lip when placed together immediately after the removal of the central projection, he advises it to be taken away in the first place, so that all the irritation caused by this part of the operation may have ceased before the uniting process is commenced. The only objection to this mode of proceeding is the necessity which it occasions of leaving the septum deficient, owing to the removal of the skin that covers the projection, which might, if dissected

off, be employed to complete the partition between the nostrils. On the whole, I believe the best plan would be, in the first place, to detach the loose corrugated integument that lies on the anterior part of the projection; then to remove the projection itself; next to unite a part of the integument saved, with the septum of the nose, so as to complete it, all of which might be done at one operation; and, lastly, when the patient has recovered from these steps, to unite the edges of the lip. It might perhaps be useful to make the patient wear, for some time previous to the operation, a machine such as that described by Mr Dewar, for pushing the cheeks forwards, and preventing them from being drawn asunder after the operation. This little machine Mr Dewar was kind enough at my request to send to me, and I find it very well calculated for the purpose.—See his description in the number of the Journal above-mentioned.

*Wound of Thorax.*—Peter Murphy, 8 years of age, was sitting at the door of his father's house, in one of the steep narrow closes in the Old Town of this city, on the evening of the 4th of November, when it was beginning to get dark. Two men, whom he did not recollect to have ever seen before, came walking slowly down, and passing him, one of them suddenly, and without any intimation of his intention, thrust a knife into his breast. He immediately cried out, and the men, after waiting an instant as if to ascertain the extent of his injury, ran off, the one up, the other down the close. His friends coming to his assistance, found a small table or dessert knife, sticking in his side; it was sharp-pointed, and seemed to have been recently sharpened. They immediately took him to the Surgical Hospital.

There was found a small wound between the cartilages of the fifth and sixth ribs of the right side, which evidently penetrated the chest, as bloody froth issued from it during respiration, and his breathing was very laborious.

The edges of the wound having been closed, and a bandage applied round the chest to restrain its motions, twelve ounces of blood were abstracted from the arm, and nauseating doses of antimony were given during the night. Next day his respiration was very laborious, his face flushed, and pulse very quick, and there was a little emphysema round the wound. Eight ounces of blood were taken away, and the antimony directed to be continued. In the evening his breathing was still very bad, and the pain severe; the air-passages seemed to be choked, but he could not spit up any thing. A draught, containing thirty drops of antimonial wine, with fifteen of laudanum, was given, and ordered to be repeated three hours afterwards. At eleven o'clock his breathing was much oppressed; he complain-

ed of a severe headach, and his abdomen was tympanitic. A turpentine enema was administered with much relief of these symptoms.

Next morning he spat up a little blood, but his breathing was much easier, though still very quick, and his pulse rapid. The antimony was continued.

He went on improving after this date, and was dismissed with the wound healed, and in all other respects quite well, on the 14th of November.

*Wound of Vagina.*—Mary Tulloch, æt. 28, was admitted on the 22d of October, on account of an injury which she had sustained a few miles out of town, in consequence of being overturned in a cart. A very profuse bleeding had ensued at the time from the vagina, to the extent, it was reported, of two or three pounds, and when she arrived at the Hospital, there was still great pain, together with tendency to bleeding. A very small breach in the coats of the vagina was observed at the orifice, on its upper surface, round which there was a good deal of ecchymosis. Cloths wet with cold water were applied to the part. A few hours afterwards she complained of pain in the lower part of her abdomen, which increased towards the evening, and about eight o'clock twelve ounces of blood were taken from the arm, and a dozen of leeches applied to the abdomen. An ounce of castor oil was afterwards given to her.

The pain, which had been much relieved by the measures above mentioned, returned next day, though in a slighter degree, and was alleviated by hot fomentations.

On the 25th she felt so weak, that though some pain still remained, it was not considered safe to continue the fomentations.

On the 28th, the pain was rather increased, her pulse was quicker, and she complained of heat, headach, and thirst. The fomentations were resumed, and nauseating doses of tartar emetic were given from time to time.

After this she continued to improve. A small abscess in the vagina, a little above the laceration, opened spontaneously, and discharged a little bloody matter. She gradually got well, and was dismissed on the 13th of November.

It was my intention to have mentioned particularly a number of other cases; but the length to which this report has already extended prevents me from doing so; I will, therefore, conclude by stating the nature and result of the other operations that have been performed.

William Wells, æt. 13, amputation of thigh. Deep-seated abscess. Died.

James Whitehead, æt. 12, amputation of thigh. Caries of thigh-bone. Cured.

— Fleming, æt. 9, amputation of leg. General disease of the bones of foot. Cured.

Mrs Scott, æt. 65, amputation of the metatarsal bone of the great toe. Caries. Cured.

Marion Montgomery, æt. 8, amputation of great toe. Caries. Cured.

Mrs Miller, amputation of second toe. Tumour. Cured.

Daniel Buchanan, æt. 32, amputation of thumb, metacarpal bone. Injury. Cured.

Thomas Moffat, æt. 69, amputation of thumb. Whitlow. Cured.

Mrs Hird, æt. 24, amputation of finger. Whitlow. Cured.

Margaret Jackson, æt. 49, excision of mamma. Scirrhous. Died.

John Clerk, æt. 80, excision of a cancerous sore of face. Cured.

Margaret Robertson, æt. 22, excision of cancerous sore of arm. Cured.

Alexander Donaldson, æt. 39, extraction of polypus nasi. Cured.

Mary Hall, æt. 25, fistula lachrymalis. Cured.

William Potter, æt. 46, fistula lachrymalis. Cured.

Patrick Safferty, æt. 40, fistula in ano. Cured.

William Glassil, æt. 55, hydrocele. Cured.

William Halliday, æt. 23, hydrocele. Cured.

SEVENTH REPORT  
OF  
THE EDINBURGH SURGICAL HOSPITAL,  
FROM FEBRUARY TO AUGUST 1831.

BY JAMES SYME, Esq. F. R. S. E. &c.

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(*From the Edinburgh Medical and Surgical Journal, No. 109.*)

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SINCE last Report, 1263 cases have applied at the Hospital for relief. Of these 168 were admitted, and the remainder treated as out-patients. On the 8th of May the institution completed the second year of its existence, and the tabular view of diseases shows what has been done during this period. The following extract from the Second Annual Report to the Contributors, may be interesting to the friends of the Hospital who have not an opportunity of seeing that document.

Receipts.			
Contributions from the public,	-	L. 203	13 6
Fees from students for attendance,	-	54	12 0
Cash from James Syme, Esq.	-	380	14 4
Due by treasurers on last account,	-	91	5 3
		L.730	5 1

Expenditure.			
Rent, taxes, insurance, and wages,	-	L.183	16 5
Maintenance of patients,	-	385	14 11
Medicine L.60, and furnishings to the Hospital,	138	15 2	
Miscellaneous,	-	21	18 7
		L.730	5 1

*Wounds.*—Several severe injuries from gunpowder have occurred, of which the most remarkable are the following:—

Mrs Huntley, æt. 37, in endeavouring to light a fire, sprinkled gunpowder over it from a flask which she held in her hand. The powder ignited, and being little short of a pound in quantity, exploded with such force, as to blow out the pannels of the door, and crack the plaster of the walls completely round the ceiling of the room. The only personal injury sustained was a rent in the hand, which nearly separated the thumb, being in the same situation, and of the same extent, as the first incision which is made for amputating it at the carpal articulation. The joint was not only open, but completely divided all round, and the soft parts were very much injured. The portion of integuments that remained was cut through, so as to preserve a pretty good flap for covering the raw surface. The patient recovered without any remarkable occurrence.

John Crosley, aged 30, on the evening of the 27th of May, fired a gun, which burst, and injured his left hand so severely, that he was immediately brought to the Hospital from six miles distance. On his arrival, he was found in a very distressed and agitated state, at the same time suffering from a degree of stupor similar to what is caused by intoxication. The hand was lacerated so extensively, that all the nerves, muscles, tendons, &c. of the palm, were either torn across or detached from each other, no less completely than if they had been dissected; and the bones of the carpus, as well as metacarpus, were reduced to fragments. Since the accident there had been a considerable, but not profuse hemorrhage. As the condition of the limb rendered its preservation plainly impracticable, amputation was performed by double flap, a little above the wrist. The patient's appearance was instantly improved, he became calm, and felt his hand as before the accident, though previously he had no feeling of its existence. He made a good recovery, though of a very robust plethoric habit, and was dismissed a week after the operation, as his affairs at home urgently required his presence.

The most interesting circumstance in this case was the state of the arteries. Two of the largest divisions of the palmar arch were torn through, yet the hemorrhage had not been excessive. The fact that torn arteries bleed little or none has not yet been satisfactorily accounted for. Mr Charles Bell thinks that the loss of vitality consequent upon the severe injury will increase the adhesive attraction between the blood and vessel, so as to promote coagulation. Many people are satisfied with the alleged greater retraction that follows tearing; and others

prefer the explanation which attributes the occurrence in question to the internal coats being ruptured more extensively than the external ones, and thrown into folds which obstruct its cavity. The truth seems rather to be, that, when the artery is stretched, the internal and middle coats give way before the tough cellular envelope, which, when it at last yields also, collapses about the others in a conical form. Trials on the dead subject suggested and have repeatedly confirmed this opinion, which agreed with the appearances observed in the hand under consideration, where the orifices of the vessels could not be discovered without difficulty, though they were of a considerable size.

*Contusion of Foot.*—James Black, aged 14, was admitted on the 1st of July, in consequence of an injury which he had sustained from the wheel of a loaded cart that passed over his foot while he lay asleep on the road a few miles out of town. All the toes were broken, and that next the great one was also dislocated at its metatarsal joint. The integuments of the instep and inner side of the foot were detached from their subjacent connections, and the metatarsal bone of the great toe was denuded throughout almost the whole of its extent.

The dislocated toe was removed, but an attempt to preserve the remainder of the foot seemed warrantable, and the edges of the wound having been brought together, suitable means were employed to oppose excessive action. The case promised well until the 4th, when the toes showed symptoms of mortification, and on the 6th they were so thoroughly deprived of life that there could be no hope of their recovery, and it became a question whether they should be left to slough away, or be removed at once by amputation. The latter alternative was chosen, because it seemed likely to afford both a more speedy and a more perfect cure than the other, by which the extremities of the metatarsal bones could have had no sufficient covering. The operation was performed on the 7th, according to the method of Lisfranc, and the wound healed sooner than might have been expected from the lacerated state of the parts concerned in it. The patient is now able to walk on the stump, which is quite healed, and promises to be ultimately hardly less useful in progressive motion than the entire foot.

In these reports two cases have been related, in which partial amputation of the foot was performed by the operation of Chopart,—no more of the tarsus being left than the *os calcis* and astragalus; and it has been stated, that the tarso-metatarsal amputation is hardly ever admissible, in as much as the disease, viz. caries, for which it is necessary to remove a part of the foot, is almost always either too limited to warrant, or too

extensive to admit of a section between the tarsus and metatarsus. It is only in cases of injury from mechanical violence, or cold, where the toes and farther extremities of the metatarsal bones are affected, that this operation can be performed with advantage. In regard to the mode of operating it is right to acknowledge the credit due to M. Lisfranc for ascertaining the means of overcoming the difficulties which are presented by the very irregular surfaces of the different articulations that require to be divided.

**Fracture.**—Of the numerous cases of fracture which have come under treatment the following may be particularly noticed : Robert Dunn, aged 7, was admitted on the 29th of May, on account of fracture of the thigh, which he had sustained the night before from the wheel of a cart passing over it. It was found on examining the limb that the lower portion of the bone was drawn up before the upper one. The case was treated as usual by means of the long splint, and terminated favourably.

The position of the broken extremities observed in this case is extremely rare. I have met with it once before in a child three years old, where the bone was fractured by direct violence, viz. the blow of a poker. In the museum of the College of Surgeons there are two instances of it, both in adult bones ; one of which belongs to the collection of the late Dr Barclay, the other to that of Mr Charles Bell. There can be no doubt that the bone is thrust anteriorly in opposition to the tendency of the muscles, at the time of the injury, and by the same force which occasions it.

Alexander Christie, aged 49, from Leith, was admitted on the 15th April, on account of compound fracture of the leg, caused by falling from a scaffold, fifteen feet high. The wound was small, and seated over the shin, about a third from its upper extremity. The limb was greatly distended, and covered with large vesications, some of which contained dark fluid, others yellow. These vesications result from the direct effect of external injury, and ought not to excite apprehension, except in so far as they show that the limb has been severely bruised. On all occasions, but more especially in compound fracture, they are apt to cause alarm, and mislead to the belief that gangrene has commenced. The patient in question exhibited an exceedingly unhealthy irritable aspect, and, in addition to the fracture, had suffered a concussion of the spine, which for several days gave rise to obstinate constipation and inability of discharging his urine. The prognosis in every point of view was very unpromising, but the recovery went on most favourably, and was completed on the 13th of June. The successful ter-

mination of this case is perhaps in no small measure to be ascribed to the constant and careful application of cold wet cloths to the limb so long as there was any fear of inflammatory action.

Andrew Linklater, aged 48, first mate of a ship preparing to sail from Leith to India, fell upon the deck and suffered a compound fracture of the leg rather below its middle. He was admitted into the Hospital on the 14th of March, a fortnight after the accident. There was then, probably, in consequence of his journey from Leith, great displacement of the fractured extremities. The bone having been carefully reduced, the limb was placed on an inclined plane, and the patient felt no more pain. But the union went on very slowly, and it was not until the 20th of May that the uniting medium seemed to be ossified.

This case illustrates the delay of reparation, and danger of causing the formation of a false joint that proceed from allowing fractured bones to be moved after the accident. In the summer of 1829, a French gentleman sustained a simple fracture of both bones of the leg, by falling backwards out of a little Highland cart in going up a steep ascent. The accident happened in a very wild district, and the patient being desirous to reside in Edinburgh during his cure, travelled, during three successive days, nearly 170 miles in carts, coaches, steam-boats, &c. The limb was set at Oban, and afterwards more methodically at Glasgow, but, notwithstanding every precaution to the contrary, was kept in almost incessant motion so long as he was upon the road. When he arrived here, it appeared to be in a very satisfactory state, there being no inflammation or tension, and no difficulty was experienced, either in replacing or in retaining the extremities of the bone. The patient behaved with the utmost steadiness, and his général health continued perfectly good, yet the cure for many weeks did not seem to advance, and it was not until we almost despaired of its completion, that firmness began to be restored.

It is a most mischievous, though common opinion, that the reparation of fractures is not commenced until a week or two after the accident, and that consequently no harm results from leaving the broken surfaces at liberty during this period.

John Ferrier, aged 28, was admitted on the 22d of July, having his jaw broken by a fragment of stone that was blasted near him. There was a wound of the cheek, and an extensive laceration of the gum showed a very oblique fracture of the base of the bone opposite the grinding teeth. A handkerchief was applied, so as to brace up the jaw firmly, and then the broken surfaces which had previously been displaced laterally to a considerable extent resumed their proper situation. It has

## 6 *Seventh Report of the Edinburgh Surgical Hospital.*

been already explained in the fifth of these reports, that the interposition of any foreign substance between the teeth is equally useless and inconvenient.

In the Fourth Report mention is made of John Macdonald, aged 40, who, five years ago, suffered a very bad compound fracture of the thigh at the trochanters. He had a very tedious cure, and afterwards suffered occasionally from the separation of small exfoliations. At the time he first applied at the Surgical Hospital, 29th March 1830, his state was so unpromising that different practitioners had given him up as incurable; but a pretty large piece of bone having been discovered lying loose at the bottom of a sinus, and extracted, he soon got better, and suffered no farther trouble from the limb until the 12th of May 1831, when he felt a severe pain in the thigh, which at the same time began to swell. He was admitted on the 2d of June, and could hardly have been recognized, so much was his appearance altered for the worse. He was thin and anxious looking; his voice hollow; his eyes dull; his tongue dry; and his stomach so irritable that he rejected nearly all his food; and suffered from frequent hiccup. The thigh was greatly swelled from the knee to the *trochanter major*, and fluctuated distinctly, but was not at all discoloured. By means of a trocar, thirty-one ounces of fluid resembling putrid blood, and having a most insupportable fetor, were drawn off, and two days afterwards, a free incision was made, when twenty ounces more of the same sort of fluid escaped. The limb was carefully bandaged, and the patient had a discretionary allowance of beef-tea, which was the only article of nutriment his stomach could retain. The discharge improved in quality, and diminished in quantity, and hopes began to be entertained that he might still do well. The stomach again, however, became extremely irritable; his tongue was perfectly dry and smooth, as if covered with a cuticle; and his whole appearance so strongly indicated approaching dissolution that it was expected every day. As several days passed without its happening, or any material change taking place, it came to be a question whether or not amputation ought to be performed. To assist in deciding this point, the cavity of the abscess was carefully probed, and the bone was felt to be exposed as high as the trochanter. The operation seemed to promise the smallest possible chance; and its performance in such circumstances was extremely unpleasant, as there was no small probability of the patient's dying on the table. As every one who saw him considered his death as certain, and very near, unless he was relieved from the disease, and thought that amputation afforded some room for hope, it seemed proper to state the matter fully to the friends of the patient, who decided on making the trial.

On the 21st the thigh was amputated by double flap at the trochanter; but as it then appeared that the same diseased state of the bone which existed lower, extended still farther up, it became necessary to remove the remaining portion of the femur from the acetabulum. This was done without any farther external incision, or the ligature of any more vessels, and the wound was then dressed as usual. The patient took soup and cordials frequently during the day, but sunk towards the evening, and died seven hours after the operation. The bone when examined showed no trace of periosteum over a large extent of its surface, farther than a thin layer of gelatinous substance, similar to recently effused coagulable lymph.

*Osteo-Sarcoma.*—This expression is usually employed to denote two very different morbid growths connected with the osseous tissue. One of these is similar in all respects to the medullary sarcoma of the soft texture, and constitutes a truly malignant disease. It occupies various situations in respect to the bone; being sometimes between its external surface and the periosteum; sometimes in the medullary canal; sometimes takes the place of the bone itself; and not unfrequently expands the osseous substance into shells, plates, or spicula, which contain it within their cavities or interstices. The superjacent integuments become discoloured, and their veins enlarge. Its disposition is always the same, and this is to inflame, suppurate, and fungate, the excrecence sometimes bleeding, sometimes not, but constantly affording a profuse discharge. Any operation, short of entire removal, cannot be performed with safety on such growths, as the irritation of it hurries on the morbid action in the portion that remains. The other kind of tumour comprehended under the designation of osteo-sarcoma possesses the consistence and appearance of fibro-cartilage. It is contained in a capsule which, when deprived of its coverings, has a glistening appearance. Like the medullary sarcoma, it is variously situated in regard to the bone, which is expanded into a shell, produced into radiating plates, or removed by absorption, accordingly as the growth occurs internally, externally, or in its substance. The bone, though thus altered in shape, seems to remain perfectly sound in its texture; and there is reason to believe would resume its natural form if freed from the morbid growth. The integuments are not altered; and no inconvenience is experienced from the disease, except what is occasioned by its bulk. The mass may be treated with great freedom; and when a portion merely of it is cut away, the remaining surface heals as if perfectly sound; but the part that has been left continues to grow, and soon restores the swelling to its former size. There is no remedy for these growths, except removal of the bone in which they are seated;

and the result of such operations is very satisfactory, since the disease rarely recurs.

Charles Farmer, aged 24, from the east of Fife, entered the Hospital on the 28th of January, on account of a swelling of the left leg. The enlargement occupied the region of the upper third of the tibia, together with the space between it and the fibula, both before and behind. The swelling rendered the limb about a half larger than usual; it was unequal as to surface and consistence, being in some parts almost fluctuating, and in others nearly as hard as bone; and was covered by dark-coloured integuments, the veins of which were much enlarged. The patient complained of constant pain in the limb, which was particularly distressing at night. He observed the leg to be swelled and painful about eleven months previous to admission; and since then these symptoms had progressively increased.

As there could be no doubt as to the necessity of amputation, the operation was proposed to the patient, and performed so soon as his consent was obtained, on the 14th February. He made a good recovery, and continues well.

The diseased structure was found on dissection to bear the most exact resemblance to that of the man Linklater, whose case has been related in the fifth report. The tumour originated in the central part of the tibia, and having made a way out by inducing absorption of the bone, then expanded in all directions. It possessed an irregular tuberculated surface, and soft brain-like consistence. It had encroached upon the joint; and there was a commencement of similar growth in the external condyle of the femur.

A few weeks ago I amputated a foot in private practice, on account of a medullary sarcomatous growth the size of an orange, that proceeded from the *os calcis*. There is at present living in town, under the care of Mr Davidson, Roxburgh Street, a man of fifty-seven, who labours under this disease in the unusual situation of the sacrum. The tumour is large and bulging; the integuments are dark-coloured; and though the consistence of the swelling is in general firm, some parts convey such a deceptive feeling of fluctuation, that one not familiar with this resemblance could hardly avoid introducing a lancet. The patient suffers great pain in the tumour as well as the rectum and other neighbouring parts.

The following is an instance of the other kind of growth, which may be named the fibro-cartilaginous tumour. In the second volume of John Bell's *Principles of Surgery*, p. 180, a case is related of which some extracts will be sufficient to give an idea of its most important features.

"A young gentleman, Mr H——, about 25 years of age, of an athletic form, and healthy constitution, and without the slightest taint of disease, hereditary or acquired, had, from no perceptible cause, a tumour, firm, cartilaginous, and elastic, seated so fairly in the centre of the gums, as to raise the two centre teeth of the lower jaw from their sockets far above the general range of the teeth, and separate the two that lay adjacent."

—"The tumour was about the size of a walnut, irregularly globular, knobby and shining."—"A tyro must have believed it to contain a fluid."—"I was well aware that not a drop of fluid would follow a puncture, that the tumour inflaming, would turn out its edges, spread into a fungus, and in a few months cause a horrible and melancholy death."—"Dr Monro, Mr Allan, and myself having consulted on the nature of this tumour, declared it to be of a most dangerous nature."—"We explained to our patient that it contained no fluid,—was incapable of suppuration,—was sure to become cancerous,—admitted of no delay,—and that we dared not do less than extirpate it from the very root." Mr Bell describes the operation, and represents by drawings the appearance of the tumour, both before and after the operation. He used "a scalpel of special strength."—"All my strength of hand was requisite to carry the knife down to the angle."—"I cut with such decision, with such level lines, and made them so fairly meet with each other in the angle, that by pressing my two thumbs, one within side of the tumour, the other without, I pushed it out clear and unmangled."

"This gentleman is perfectly cured ; the gums and adjacent teeth firm and sound ; and I confess I could not reflect on the structure of this small tumour, without saying within myself, What would have been the state of this tumour in three months ? What would have been his state in six or eight ? In its second stage, in little more than three months it must have filled the mouth with a fetid bleeding fungus ! In eight or ten months it must have assumed the perfect character of incurable loathsome cancer !"

It is evident that Mr Bell did not make the distinction that seems to be required between the medullary sarcomatous and cartilaginous growth of bone. If this tumour had been of the former kind the result of his operation would not have been so satisfactory, and he would probably have had to encounter the fungous excrescences he so impressively describes. As it was, the morbid disposition still remained, and after lying long latent, at last showed proof of its existence. About twelve months ago, that is, twenty-two years after Mr Bell's operation, this gentleman applied to me on account of a tumour which so precisely resembled the one described by Mr Bell in size, situation, appearance, and consistence, that the engraving in his work would

have answered equally well for representing it, with the exception of the two front incisors being now absent. He stated that the swelling had commenced some months previously, and was increasing. He had little or no pain, but a sort of uneasiness about the mouth and numbness of the lip.

In consultation with Dr Shortt and Mr Nasmyth, it was resolved to cut out the tumour again, and this was accordingly done. It then appeared that the morbid formation descended in the interstices of the bone, and when, by means of the cutting-pliers and gouge, nearly the whole thickness of the jaw at the part concerned had been removed, the surface presented still showed cells filled with the same unhealthy substance. It was now evidently the most prudent course to saw through the bone on each side of the affected portion, but this proceeding was much more severe than the patient or his friends contemplated, and as the former operation, though not radical, had afforded so long an interval of freedom from visible disease, it did not seem warrantable, and therefore the actual cautery was applied very freely in its stead.

The wound healed kindly, and the cure seemed to be complete. At the end of two months, however, the patient observed that there was more than usual fulness under the tongue, and it soon afterwards became obvious that the tumour was growing again along the whole extent of the jaw concerned in the former operation. The propriety of removing the affected part of the jaw was now strongly represented to the patient. He then consulted a person, who, for several weeks, made him believe that the external application of ointments would remove the swelling. Being at length awakened from this delusion by the decided opinions of Drs Ross, Shortt, and Hunter, Sir George Ballingall, Mr Nasmyth, and myself, he submitted to the operation, which was performed in the usual way. The jaw was divided on the right side, opposite the second bicuspid tooth, and on the left, immediately anterior to the last grinder, but as it appeared that, though the external part of the bone was sound here, a process of the cartilaginous growth extended into its centre, another portion was taken away, so that nothing but the ramus was left on this side. The wound healed everywhere by the first intention—on the ninth day the patient shaved himself completely, and he has remained since perfectly well. Five months have now elapsed, and he seems to be safe from any relapse. He speaks with perfect distinctness, and is so little altered in appearance that no one would suspect any thing unusual in the state of the mouth.

Had this tumour been left to itself, it would not probably have led to the frightful consequences anticipated by Mr Bell, but

rather have gone on increasing in size, like the similar growth which was removed from the young man Penman, after repeated ineffectual attempts had been made to excise it, and being ultimately allowed to grow until it weighed four pounds and a-half.

*Exostosis of Great Toe.*—In the 26th volume of this Journal, there is a paper by Mr Liston on Exostosis of the Toes, the object of which is to recommend amputation of the toe in preference to the removal of the tumour, which he asserts to be of no use. As an operation so severe and distressing, from the deformity which it occasions, must be performed with extreme reluctance, the two following cases seem deserving of notice.

Hannah Dickson, aged 19, four years ago observed a hard tumour at the edge of the nail of the great toe, which gradually increased, and at length proved so troublesome, as to induce her to submit to an operation for its remedy, which was performed on the 9th of May.

The nail having been cut away so far as it did not adhere to the parts below, which was for about half of its breadth and up to its root, a semilunar incision was made on each side of the tumour, the size of which was equal to that of a small nut; and the neck of the exostosis was divided with the cutting-pliers. A piece of caddis was then applied to the wound. The patient suffered no trouble afterwards; was able to walk in a few days; and has continued quite well ever since.

Mrs Hamilton, aged 35, applied at the Hospital on the 19th of May, labouring under a complaint precisely similar in all respects to the one just described. It had existed two years, and rendered her very lame. The excision was performed in the same manner, and was followed by a recovery equally speedy and complete. The exostoses removed in these two cases were precisely of the same kind, size, and figure, as those described and represented in the paper referred to.

*Dislocation.*—Several cases of dislocated humerus have occurred, without presenting any thing remarkable; but a dislocation of the elbow which was met with in private, deserves mention, on account of a peculiarity in its diagnostic symptoms. Dr Begbie asked me to see a boy who had met with an injury of his arm. The projection of the olecranon backwards, and that of the humerus forwards, left no room for doubting as to the existence of dislocation in the ordinary direction backwards. But the limb was perfectly straight, instead of being bent, as it usually is in such circumstances, unless it was supposed that the brachiaeus had been ruptured. The reduction was readily accomplished in the usual manner.

*Chronic Inflammation and Ulceration of Joints.*—The actual cautery has been employed in a great number and variety of diseased joints with so much advantage, as to satisfy all who observed the results of its application, that it is the most effectual remedy in a numerous class of such cases.

John Tulloch, aged 31, from North Rondaldsha, one of the most remote of the Orkney islands, was admitted on the 11th of May, on account of a great enlargement of the right knee. It commenced below the patella, and extended upwards to the farthest limit of the synovial membrane. The circumference of the joint measured twenty inches, and the swelling, so far as could be ascertained by external examination, was partly fluid, but chiefly of solid consistence. The patella seemed to be much larger than usual, and when moved laterally, occasioned a very distinct crepitation. He complained of a constant deep-seated gnawing pain, which was particularly severe at night, and was referred principally to the lower part of the tumour, near the head of the tibia. The knee was slightly bent, and quite useless in walking, which he could accomplish only when assisted by a crutch.

The complaint was of more than twelve years standing, but had not rendered him unfit for work until five years ago, when, in consequence of a fall, it became aggravated, and has, since that time, become progressively more severe. He had been leeched and cupped without any benefit.

The cautery was applied on the 16th, so as to form an eschar on the outer side of the joint four or five inches long. Next day he stated that he had passed a more comfortable night than he had done for the last two years, and his whole appearance indicated great relief. In three or four days the swelling was greatly diminished on the side to which the cautery had been applied, and the patient felt in all respects much better. On the 20th the knee was burned on the inner side at his own request, and he afterwards went on improving, though not so rapidly as after the first application of the iron. On the 9th of June the knee measured only fifteen inches in circumference, the girth of the sound one being fourteen. The joint could be moved without pain, but he was not able to rest any weight upon it. He then suffered an attack of erysipelas, which was at that time very prevalent in town, attended with great constitutional disturbance, for the remedy of which the chief means employed consisted of the tartrate of antimony. Towards the middle of July a marked progress towards amendment was visible, the patella being reduced to nearly its natural size, and moving freely without any crepitation. At the same time the patient began to recover some command over the joint, which

still, however, continued preternaturally lax, allowing the head of the tibia to be moved from before backwards, as if the ligaments were destroyed. He returned home on the 2d of August with every prospect of gradually regaining some strength in the limb, but at all events freed from the pain he previously suffered, and no longer threatened with the necessity of amputation.

*Suppuration of Wrist-Joint.*—When inflammation of a joint ends in suppuration of the articular apparatus, it is impossible to predict whether or not caries will be induced, and it is only by the decision of time that this question can be answered. It is therefore necessary to be cautious in condemning such cases as incurable, especially those of them that originate from wounds, because this sort of irritation is sufficiently powerful to occasion suppuration of a joint in the soundest constitutions, where caries rarely occurs.

Thomas Smith, aged 19, from Kirknewton, was admitted on the 2d of April, recommended by Dr Dick of Mid-Calder, on account of a very formidable-looking affection of the right wrist.

The hand and lower part of the arm were much swelled, and quite powerless. Over the styloid process of the ulna there was an ulcer about the size of a half crown, having a soft spongy surface, and affording a copious thin discharge. A probe passed readily at the centre of this opening into the cavity of the joint, and grated over the bones composing it, which were divested of their coverings.

A small deep-seated encysted tumour, adhering to the bone, which had existed three years, was removed in the country six weeks previous to his admission into the Hospital. Inflammation followed the operation ; and the limb was gradually reduced to the state which has been described.

Simple dressing, succeeded by sulphate of zinc lotions, and careful pressure of the limb, effected by a roller, applied from the fingers upwards, were used with so much advantage, that the patient returned home at the end of three weeks nearly well. The wound was healed, the swelling was entirely removed ; and though the limb remained somewhat distorted, owing to the injury which the joint had sustained, it promised to be soon as useful to him as ever.

Thomas Melville, aged 60, from Leuchars, in Fife, recommended by Dr Graham of Cupar, was admitted on the 20th of July in the following state. The left hand was thickened in the region of the carpus, on the posterior surface of which there was an opening that allowed the probe to pass down to the bone, which was bare and loose. In the palm there was also a small aperture, which led to a narrow sinus, extending

towards the former one. The thumb was drawn inwards, and, together with the fingers, was nearly quite rigid. The patient complained of severe and unceasing pain in the back and palm of the hand.

Somewhat more than a year and a-half ago he received a puncture in the palm of the hand, between the metacarpal bone of the thumb and fore-finger, from the prong of a pitch-fork. Great pain and swelling, with constitutional disturbance, followed this injury, and his complaints having subsided into a chronic form, have ever since rendered him unable for work. He applied to various practitioners, regular and irregular, and was treated with a corresponding variety of judicious and injudicious means of relief, but without experiencing any permanent benefit from any of them ; and he had at length resolved to part with his hand, unless some efficient remedy was speedily afforded.

The opening on the back of the hand having been slightly enlarged, two loose pieces of dead bone were extracted. In a day or two afterwards the cavity was carefully examined, and found to communicate with the opening in the palm. A silk thread was passed from the one to the other, with the view of introducing some escharotic, if the state of the bones should be found to require it ; but as no trace of caries could be discovered subsequently, it was withdrawn, and acetate of lead lotion applied to the sore parts. He improved daily ; the openings healed ; the burning pain of the hand gradually diminished ; and the fingers as well as the thumb became more moveable. He was dismissed on the 9th of August.

*Caries of Elbow-Joint.*—William Ford, aged 30, seaman, was admitted on the 13th of May, on account of diseased elbow-joint. About a year previous to this time, while on his passage home from America, he suffered a severe strain of the elbow while steering the ship. The arm soon afterwards became very stiff and painful, so as to render him unfit for duty. Having arrived in the Thames he lay for several weeks in the Floating Hospital, where he became worse. He then went home to Leith, and was sent to the Surgical Hospital by Mr Cheyne.

The limb was greatly enlarged and indurated, not only about the joint but to a considerable distance above it, and for nearly half way down to the hand. There were several openings at different parts of the arm which discharged copiously, and allowed the probe to enter very deep, but not to reach the bone. He suffered great pain with hardly any intermission, and could not bear the slightest attempt at flexion or extension.

When admitted, he laboured under a short harassing cough, which in a few days became more severe—and being attended with

a very rapid pulse and profuse expectoration, excited serious apprehension as to the state of his lungs. At his own request he was dismissed on the 4th of April, in order to recruit his health sufficiently to bear the operation which was requisite for removing the disease.

He returned on the 12th of May, when his general health seemed much improved, but the state of the arm was much worse. The swelling and discharge had increased, while the whole appearance of the arm indicated an extension of the disease. The cough still continued, but was very slight, and accompanied with a very inconsiderable mucous expectoration. Had the condition of the joint been favourable for operation, or the condition of the system such as to promise a favourable process of recovery, it would have been thought right to perform excision of the diseased bone, not only to save the patient's arm, but also to avoid the risk attending amputation in a patient exhausted by long suffering and profuse discharge. But as there was reason to suppose, from the great extent and hardness of the swelling, that the operation for removing the articulation would be extremely severe, and be followed by very profuse suppuration, together with exfoliation, and as the patient was exceedingly weak and irritable in mind as well as body, it seemed better to take off the arm.

The operation was performed on the 8th of June almost by force, the patient having made up his mind to it again and again, but always drawn back when the time he had fixed arrived. Next day his pulse was 134, and his skin very hot. Great apprehensions were entertained of internal effusion owing to this great excitement of the system, which continued for several days and then gradually declined. The means employed to allay it were chiefly the tartrate of antimony, and also opiates, with blisters to the legs. He was dismissed on the 29th of June.

*Caries of Tibia.*—William Laird, aged 32, was admitted on the 5th of April, labouring under an affection of the left leg and knee, which presented the following appearances. In the course of the tibia there were several openings which allowed the probe to reach the bone and enter into its substance, which was bare and of a cellular structure. The knee was considerably enlarged, and when pressure was made on it, pus flowed out at the openings in the leg. The patient's countenance indicated extreme suffering and exhaustion—the lips were pale, and his eyes had a dull unmeaning expression. He stated that the leg was shattered by a kick from a horse fifteen years ago, and that several pieces of bone had subsequently separated. After a tedious cure he at length got well, and continued so until six

weeks before the time of his admission, when he was suddenly seized with violent pain in the limb, which suffered no remission or abatement.

The limb was amputated by double flap on the 7th ; the muscles seemed as if separated from each other by dissection or putrefaction, and all the parts were so very much relaxed that the operation would have been better performed by a simple circular incision down to the bone. The patient lost more blood than usual, owing to the number of vessels which required to be tied, and the difficulty of securing them. About two hours after the stump was dressed, a considerable bleeding occurred and rendered it necessary to tie another small artery. Next day the patient expressed satisfaction with his condition, as he had slept well and was free from pain. Alarming symptoms of exhaustion then appeared, and he was stimulated frequently with small doses of whisky and warm water. On the second day he was in much the same state ; on the third he was sunk down in bed ; his countenance anxious ; tongue dry ; pulse 170 ; the stump shrunk and secreting little matter. The bowels were opened by injection and the stimulation was continued. He rallied towards the evening, when his tongue became moist, and his pulse fell to 120. He looked and felt better. On the fourth day he continued in a more promising state, the stump also was improved in its condition ; on the fifth day he relapsed into his former weakness ; on the sixth he remained much the same ; and on the seventh he died.

On dissection forty ounces of sero-purulent fluid were found in the left cavity of the chest. The corresponding lung had suffered the alteration named grey hardening, and sunk in water.

When the amputated limb was examined it appeared that the cavity of the joint communicated with several carious excavations in the head of the tibia, and that this bone was thickened, softened, and carious throughout nearly the whole of its extent.

*Dropsy of Knee-Joint.*—Several cases of dropsical effusion into the knee-joint came under treatment, and one of them, viz. that of Helen Jackson, aged 40, was remarkable on account of its large size. They yielded readily to blistering, followed by pressure.

*Moveable Cartilage.*—Anne Miller, aged 14, applied on the 12th of December, labouring under a painful enlargement of the knee, which prevented her from using the limb. She had been complaining of the joint for several years, but was only of late rendered unable for work as a house-servant. The swelling evidently depended for the most part on the presence of a fluid, and blisters therefore were applied, first on one side of the

knee, and then on the other. The distension having been thus removed, two small moveable bodies were felt within the articulation, one on each side of the ligament of the patella. She was advised to wear a laced knee-cap, and on the 15th of February resumed her occupation, which she has followed ever since.

Some time ago Mr George White asked me to see a young medical gentleman who was confined to bed in consequence of a strain of the knee, and who had discovered two or three moveable bodies within the joint to which he ascribed his suffering. He was anxious to have them cut out, but we advised pressure, and he has been quite well ever since, though the cartilages are still as perceptible as they were.

*Ganglion of Knee.*—Mary Auld, aged 21, was admitted on the 10th of May, on account of a tumour about the size of half of a small orange, seated on the patella, which was so painful as to render her lame. The swelling evidently depended on a morbid accumulation of fluid in the subcutaneous bursa that lies over the patella, and thickening of the membrane composing it. A small puncture, therefore, was made with a needle, and the contents having been thus evacuated, a blister was applied. The raw surface was then dressed with a mixture of iodine and camphorated mercurial ointment, and carefully bandaged. She was dismissed quite well on the 19th of May.

*Hernia.*—John Manson, aged 61, was admitted on the 15th of May, labouring under a large strangulated scrotal hernia of the right side. He had been subject to occasional protrusion of the bowels in this situation for more than thirty years, but never wore a truss. On the evening before his admission, while making an exertion in putting up a bed, the gut suddenly came down to a greater extent than it had ever done previously, and he felt severe pain, stretching from the tumour into the lumbar region, with sickness. During the night he vomited occasionally, and continued to do so the succeeding day, at the same time complaining of pain, and exhibiting the other ordinary symptoms of strangulated hernia. After his admission, at 2 P. M., repeated simple, purgative, and tobacco injections were thrown into the rectum, without producing any evacuation, and careful attempts at the taxis proved unavailing. Towards the evening his pulse became more frequent and small; his appearance indicated greater suffering; and his abdomen was observed to be tender on pressure. He was bled to the extent of ten or twelve ounces, his weakness seeming to render the abstraction of a larger quantity improper. At 9 P. M. his pulse was 130; the abdomen was more tender, and his condition was evidently

becoming progressively worse. In consultation with my colleague, it was agreed, that though large hernias seldom require operation, and there was little reason to suppose the stricture at the neck of this one could be productive of much inconvenience, considering the thickness of parts necessarily included within it, we should nevertheless not be justified in allowing the peritoneal inflammation to proceed, without ascertaining by actual examination that there was no cause to excite or maintain it within the tumour.

An incision about three inches long was made in the direction of the swelling, beginning a little above the external ring. When the sac was opened, eight ounces of serous fluid excessively fetid, escaped. An aperture having been formed at the neck of the sac sufficient to admit the fore and middle fingers, it was ascertained that the protruded parts were but slightly embraced by either the outer or inner orifice of the inguinal canal ; and as it followed that the seat of the evil lay elsewhere, it was then thought right to bring into view the whole of the protruded viscera. This being done, they were found to consist of the *caput cæcum*, with its vermiciform appendage, and a loop of the ileum. The former was natural in its appearance ; but the latter was very soft and black-coloured, though not mortified. The ileum was returned ; but the *caput cæcum*, which was greatly distended with flatus, could not be replaced ; and the only alternative that remained for choice was to leave it protruded, or puncture its coats, so as to allow of their collapse. The latter was decided on, and immediately executed ; and as some thin feculent matter issued, along with the air, a ligature was passed through the edges of the wound in the gut, and fastened to the skin. Some stitches were then introduced to approximate the integuments. The patient obtained no relief, and died at half past three the following morning.

On dissection it was found that a portion of the ileum, about two feet in length, was twisted twice round that part of the gut which enters the cœcum, so as to cause a most complete and irremediable obstruction. The loop of the ileum, which had been protruded, was recognized by its dark colour, and had no connection with this convolution.

*Lithotomy.*—John Valentine, aged 50, from Berwickshire, was admitted on the 9th of March to be cut for stone, under the symptoms of which he had laboured for seven years. He appeared a stout country man, but was very low spirited, and suffered from a violent pulsation in the epigastric region, which frequently produced a visible elevation of the bed-clothes.

He was confined to bed after his arrival, to render the condition of his system more favourable for the operation. On the

15th, a calculus between three and four ounces weight was extracted without any delay or difficulty, but an unusual degree of bleeding attended the operation. After he was put to bed the hemorrhage continued, and a tube wrapped with several folds of lint was introduced into the wound. The blood continued to issue by drops during the day, with occasional intervals, but ceased towards the evening, when he had lost by computation about three pounds. During the night there was a discharge of urine from the tube, and the patient felt pretty comfortable. Early in the morning he vomited, and soon afterwards began to complain of pain in the hypogastric region. It became progressively more severe; his pulse could not be felt at the wrist; and his countenance indicated extreme distress. He died in the evening about eight o'clock.

On dissection the peritoneum was found more red than usual, and at some points small spots of extravasated blood were perceptible. When the parts concerned in the operation were examined, a small firm clot of blood attracted attention to the incision of the prostate, and it was discovered that an artery about the size of a digital branch lying on the side of the gland had been opened. This vessel precisely corresponded with the representation of Tiedemann, and the descriptions by other authors, of that irregular distribution of the pudic, in which the dorsal artery of the penis runs along the neck of the bladder, and crosses the prostate obliquely in its course. It must be rare for this unusual distribution to occur along with the far from common disease of urinary calculus; but when this unfortunate combination is met with, the result of the lateral operation can hardly be successful. In this case the incision of the prostate was at an equal angle between the transverse and perpendicular directions, yet the vessel was cut. The preparation is preserved.

The result of the following case, though operated upon under less promising circumstances, was more fortunate. Mr Sidey asked me to see Mr S., aged 80, who for several years had suffered severely from the symptoms of stone, and for nearly the twelve last months had been confined to bed by them in the greatest distress. It was explained to him that at his time of life the operation was attended with much more danger than at an earlier age, but that the chance of its success was still in his favour. He resolved on submitting to it, being unable to endure his suffering any longer. On the 15th of May, twenty-three stones from the size of a pigeon's egg downwards were extracted, not without difficulty, owing to the great capacity of his bladder, which had lost its tone, and been so much distended, that Mr Sidey repeatedly having found it necessary to in-

troduce the catheter, drew off several pounds of urine. He never had any bad symptom from the operation, but was for several weeks so extremely feeble that great apprehension was felt of his sinking. The wound is not entirely healed yet, but he is, and has been all along, free from pain.

*Abscess of Perinæum.*—Robert Gavin, aged 21, applied on the 26th of June to have his water drawn off, which was readily done by means of a full-sized catheter. He stated that the day before, he had been exposed to cold, and since then felt unable to empty his bladder. He returned the day following, and was again relieved by the same means. As he now complained of pain, and a slight degree of fulness in the perinæum, a few leeches and warm fomentations were recommended. His complaints still continuing, he was admitted on the 28th; on the 30th an abscess was discovered in the perinæum, and immediately opened, when he felt complete relief from the pain, and afterwards experienced no difficulty in passing his urine. He was dismissed on the 3d of July quite well.

Dr Fife asked me to see a middle-aged man, a chairman, who laboured under a painful swelling of the perinæum, with inability of making water. The fluctuation of matter being distinct, a free incision was made through the skin and fascia, which evacuated nearly half a pound of extremely foetid pus. His water was then drawn off, and he did not afterwards require the catheter.

Dr Combe, of Leith, asked me to see Mr D., who had been suffering eight or ten days under severe pain of the perinæum, with difficult micturition, and at length was observed to discharge pus from the urethra along with the urine. There was no tumour or tension of the perinæum, but a hardness along the crura of the penis. An incision having been made here without any benefit, the rectum was examined, and an abscess was felt pointing a little anterior to the prostate gland. A probe-pointed bistoury being conveyed into the gut, was thrust into the cavity of the abscess, and then carried outwards, so as to divide the sphincter, and integuments between the part where the matter pointed and the perinæum. The cavity when examined by the finger was ascertained to be of great extent. It gradually contracted, and though the patient's urine passed through the breach for some time, the cure was completed in the course of a few weeks.

These three cases, which occurred much about the same time, are interesting as examples of a very distressing complaint at different stages of progress.

*Obstruction of Urethra.*—William Swanston, aged 32, from Coldstream, was admitted on the 29th of July, recommended by

Dr Turnbull. Five-and-twenty years ago he received a kick from a horse on the perinæum, which occasioned difficulty in making water, and soon afterwards the formation of an abscess, which opened, and thus afforded a passage for the urine. The old canal then became entirely closed, and has continued to be so ever since, notwithstanding the attempts of various practitioners to restore it. He lately felt great difficulty and pain in voiding his water through the fistulous opening in the perinæum, and was hence induced to apply to Mr Turnbull for assistance, who found, on introducing a probe, that there was a small calculus blocking up the passage, and extracted it after slightly dilating the orifice of the fistula. It was about the size of a millet seed. The urinary symptoms were relieved for a day, but then recurred, and it was thought right for the patient to come to town.

The obstruction was found on examination to be of small extent, but extremely firm. It was divided by passing a catheter as far down as possible, and cutting with a straight sharp-pointed knife upon its extremity. The continuity of the canal was thus restored, without making any external incision.

*Sarcocele.*—John Bell, aged 54, from the East of Fife, was admitted on the 1st of April, to be relieved from a large swelling of the right testicle, which had existed three years, and attained a size equal to twice that of a goose's egg. It was extremely hard and uniform in its consistence, except at the highest part, where the fluctuation of a very small quantity of fluid was perceptible. He suffered no pain in the tumour, but was so much incommoded by its weight and bulk, as to be desirous of having it removed.

The operation was performed on the 5th, according to the principles which have been already explained in these reports, which are, to leave merely skin enough to let the edges of the wound meet together—to cut across the chord before dissecting out the testicle—and to tie the arteries one by one. He suffered no fever in consequence, and might have returned home very soon; but, being averse to leave the Hospital before the wound was perfectly cicatrized, did not do so until the 11th of May.

The tumour when divided exhibited a characteristic specimen of vascular sarcoma, and could hardly have been distinguished from the same sort of growths which are so frequently found connected with the uterus. At the neck of the gland there was a small cyst containing a dark-coloured fluid.

John Reid, aged 21, was admitted on the 3d of August, recommended by Dr Abercrombie, on account of an enlargement of the left testicle, which had existed from birth, and attained

nearly the size of a goose's egg. It was of a round shape, and rather unequal surface, there being a number of slight prominences, which seemed to depend on fluid contained within thin cysts. The superficial veins were much enlarged. The chord was sound. He suffered no pain in the swelling, which had enlarged considerably during the last twelve months; but felt an uneasy sensation in his back, and was anxious to be freed from the disease.

The operation was performed on the 6th, when the only circumstance deserving notice that presented itself, was the number and large size of the arteries; three were tied at the time, and a profuse hemorrhage, that occurred six hours afterwards, rendered it necessary to secure four more.

*Hydrocele, with Enlargement of the Testicle.*—John Watson, aged 30, was admitted on the 8th of April, labouring under a hydrocele of the right side, which had existed for eighteen months. Twenty ounces of serous fluid were drawn off; and then the testicle was found to be greatly enlarged, of irregular figure, and almost stony hardness. The urethra being examined, was ascertained to be very tightly strictured at the bulb.

The stricture was readily removed by the successive introduction of bougies gradually enlarged in size; but the swelling of the testicle remained stationary. A blister was then applied to the scrotum, which was followed by so considerable a diminution of the enlargement, that it was thought proper to perform the operation for radically curing hydrocele by injection. This was done on the 8th of May, and no disagreeable symptoms succeeded; but the fluid again accumulated. He next used the iodine ointment, with camphorated mercurial ointment, under which the testicle was at length reduced to its natural size and softness.

*Hydrocele.*—Of the cases of simple hydrocele, the only one that seems deserving of notice is that of Alexander Mackay, aged 40, from Caithness, who, in consequence of a blow on the perinæum from the oar with which he was rowing in a very tempestuous sea, has for the last ten years laboured under a swelling of the scrotum. The tumour was found to depend on hydrocele of the left *tunica vaginalis*; and forty-four ounces of greenish yellow fluid were drawn off by a trocar. It was observed to contain a very large quantity of those bright shining scales which Dr Christison first examined, and found to resemble cholesterine. Dr Bostock regards them as the result not of peculiar secretion, but of mere chemical action taking place in the effused fluid, similar to the conversion of solid animal substances into adipocire, which results from long maceration

in water. It may be mentioned in confirmation of his opinion, that when the fluid which had accumulated in this case was withdrawn ten days after the first puncture in order to perform the radical cure by injection, it did not contain any scales.

*Excision of the Os Uteri.*—Janet Bell, aged 40, from near Biggar, recommended by Dr Molison, was admitted on the 19th of July, to be relieved from an excrescence which grew from the mouth of the uterus, and protruded out of the vagina. It was of a conical shape, the base being turned downwards, and the apex connected by a narrow attachment with the posterior lip of the uterus. Its consistence was so firm as nearly to equal that of the uterus itself. The patient complained of frequent severe shooting pains in the lower part of the belly, and a profuse fetid discharge from the vagina. She had laboured under the complaint for four years. At the anterior side of the vagina, immediately behind the orifice of the urethra, there was a thick cyst about the size of a walnut, adhering by a broad base, which did not seem to occasion any inconvenience.

The excrescence was cut away from the *os uteri* by means of scissors, and, as there threatened to be a troublesome bleeding, one ligature was applied, and caustic rubbed upon the mouths of the smaller vessels.

In the evening she got up to make some alteration in her dress, and soon afterwards it was observed that blood was dropping from her bed upon the floor, when she suddenly fainted. A hook was introduced into the remaining portion of the lip of the uterus, and by its means the bleeding surface was drawn into view. It being found impossible to procure a firm hold for ligatures, either when applied to single vessels, or made to embrace the whole wound, a needle was passed from before backwards through the lip so as to convey two threads, which were then tied one on each side, and effectually restrained the hemorrhage. Colic pains, sickness, and vomiting succeeded, but were relieved by injections into the rectum, and she recovered without any particular occurrence, and left the Hospital on the 3d of August.

The excrescence was found to consist of a firm vascular sarcomatous mass containing cysts of various sizes. It would no doubt have been considered an instance of cancer by those surgeons who are accustomed to speak of extirpating cancers of the neck of the uterus. So far, indeed, as can be judged from the loose and inaccurate language which has been generally employed to describe the morbid characters of the masses amputated on such occasions, it is quite evident that they have rarely, if ever, been truly carcinomatous formations or ulcers

seated in such textures, but merely sarcomatous excrescences, devoid of any malignant action. The result of these operations leads to the same conclusion ; for, granting that the disease was truly cancerous, it cannot be denied that a large proportion of the cases must have terminated fatally, from part of the morbid structure being allowed to remain, owing to the difficulty of ascertaining its extent, and effecting its removal in such a situation ; or from the effects of the cancerous diathesis operating in other regions of the body. But of seventy cases in which Lisfranc operated, the success has been almost uniform. One woman, though the wound did not heal for two months, became pregnant fourteen days after the operation, and went her full time. In all the cases of cancerous uterus that have come within my observation, the body of the organ was distinctly affected.

*Recto-Vaginal Fistula.*—In the Third Report there is related a case in which a recto-vaginal fistula, that did not admit of closure, owing to its width and the morbid state of the parts concerned, was treated by dividing the septum between the two canals. The consequence of this operation was relief from the constant pain and involuntary discharge of feculent matter which the patient had previously suffered ; and in the course of a short time afterwards, through the attention of my late pupil Dr Login, a stricture of the rectum that had existed for several years being also removed, she became perfectly well, and has continued so ever since.

This case afforded much encouragement to undertake the case of Anne Anderson, aged 28, from Arbroath, admitted on the 8th of June, who had been dismissed incurable from another hospital after remaining in it several weeks. There was a fistulous communication between the vagina and rectum, which readily admitted the fore-finger to pass through it, at the distance of about an inch from the respective orifices of these canals. There was a number of hemorrhoidal excrescences round the verge of the anus, and several extensive cicatrices in the neighbourhood. Three inches up the rectum there was a slight stricture of the gut. The patient was a stout active-looking woman, but rendered very miserable and almost hopeless by the loathsomeness and continuance of her sufferings. She gave a confused account of her complaint, which seemed to have commenced with *fistula in ano* about two years previously, after a miscarriage at the fourth month, which had been induced by cold and fatigue.

The septum was divided, and the hemorrhoids cut away, on the 11th, and no troublesome symptom followed. The wound contracted and cicatrized, so that she soon regained command

over the contents of the rectum. She was dismissed on the 16th of July.

There can be no doubt that the recto-vaginal fistula ought always to be closed if possible; but in cases where this is impracticable, and they unfortunately constitute a large majority of the whole, the practice of which an instance has just been related seems deserving of adoption.

Elizabeth Woodrow, aged 20, recommended by Dr Cummings, was admitted on the 20th of June on account of stricture of the rectum, and a fistulous communication with the vagina at its upper extremity, immediately between the posterior lip of the uterus and the rectum. The stricture was very tight, not admitting the point of the finger, and lay about three inches from the orifice. The patient had from a very early age, if not from infancy, suffered from the symptoms of obstructed rectum; but the seat of her complaint was not discovered till she came under the care of Dr Cummings; and so far had the misconception regarding it been carried, that one practitioner prescribed a course of mercury, in the belief that the discharge from the vagina, which proceeded from the rectum, depended on syphilitic poison.

The stricture has been considerably dilated, and she is much relieved from her sufferings. In this case the septum is too extensive for division; and the small size of the aperture affords hopes of effecting its obliteration, when the gut has been restored to a healthy condition.

*Disease of Mamma.*—Helen Kirkwood, aged 45, from Earlston, was admitted on the 18th of February, on account of a scirrhous breast, which had been troublesome for eighteen months. The gland was quite moveable; the integuments, except at one part of small extent below the nipple, where they adhered, were free from disease, and there was only one enlarged gland in the axilla. The operation was performed on the 21st, and she was dismissed on the 30th of March, having been delayed in her recovery by several feverish attacks, apparently depending on a very irritable constitution.

Mrs Stratton, aged 57, was admitted on the 7th of August, on account of a very large tumour of the left breast, which commenced eight years ago by a small hard knot under the nipple. It is now larger than her head; very heavy, and irregular on the surface, which in some of the most prominent parts is of a bright purple colour. She complains of great pain in the swelling. There is no disease in the axilla, and the gland is quite free from connection with the subjacent parts.

Whatever may have been the nature of this morbid growth originally, there is reason to fear that it has now taken on

the medullary sarcomatous action; but as the patient enjoys good health and spirits, and as the local circumstances are favourable for the success of an operation, it is thought right to perform the excision, and the result will be stated in the next report.

*Ranula.*—In last report the opinion has been stated that the disease named ranula does not in general depend on distension of the salivary ducts, but consists merely of an encysted tumour. It ought to have been added, that three cases which occurred during the period embraced by that report, agreed with this view of the nature of the complaint. The following one also exhibited a similar structure.

George Simpson, aged 23, from Dalkeith, was admitted on the 19th of May on account of a large tumour under the tongue, which pressed it back almost out of sight, so as greatly to impede respiration, deglutition, and articulation, and occasioned a considerable fulness under the chin. The swelling had existed twelve months, and increased gradually. A probe was passed first into one, and then into the other submaxillary duct, as far back as the respective glands, without entering the cavity of the tumour.

An elliptical portion of the mucous membrane and cyst having been removed by means of a hook and knife, a great quantity of greyish yellow granular semifluid matter, having precisely the consistence and appearance of thin porridge, issued from the opening. The sac being found extremely thick and tough, was pulled out and detached for the greater part of its extent from the surrounding parts, to which it loosely adhered. The patient for two or three days afterwards suffered from swelling of the throat, with pain and difficulty in swallowing, and some symptomatic fever, but soon got quite well, and was dismissed on the 27th.

*Cancer of Face.*—Thomas Maclaren, aged 69, from Breadalbane, was admitted on the 21st of May, for a cancer of the lower lip, which occupied the whole of its surface from end to end, but did not extend to any great depth. It had existed for four years.

The whole of the morbid part being removed by curved scissors, the external and internal integuments of the remaining portion of the lip were sewed together, and he was dismissed with hardly any visible deformity on the 27th. A similar operation was performed in several other cases of the same kind, and with the same satisfactory result.

Peter Buick, aged 25, from Arbroath, recommended by Dr Arrott, was admitted on the 20th of July, labouring under a most formidable cancerous ulcer of the face. It had destroyed

nearly the whole of the lower lip, so that the jaw was exposed from the chin upwards. The edges of the sore were extremely irregular as to shape and colour, the discharge was profuse and excessively fetid ; the pain incessant, and, in short, all the circumstances so urgent as to warrant any mode of relief, however severe. The patient had been banished to the West Indies five years ago, and was seized with the disease about two years afterwards. The ulcer was cut out, but soon reappeared, and extended its ravages so widely, that he was considered incurable, and sent home. As he retained his appetite, and had no swelling of the glands, or indication of disease in any other part of his body, it was thought proper to perform excision of the whole morbid surface.

With this view, on the 23d, two incisions were carried through the whole thickness of the cheek, one on each side of the ulcer, and meeting together under the chin, including a third of the upper lip, and the whole integuments of the chin that remained anterior to the bicuspid teeth. The base of the jaw was then divided on each side, opposite to the second bicuspid tooth, with a saw to such extent that the cutting-pliers were enabled to effect a breach through the bone. The connections of the mucous membrane and muscles of the tongue were lastly separated ; one small artery was tied, and the edges of the large triangular wound were sewed together as far up as could be done without too much reducing the size of the mouth ; the mucous membrane and skin of the remaining portion were united together by stitches of the interrupted suture. The patient made no complaint after the operation, did not suffer the slightest feverish disturbance, and was dismissed with the wound nearly cicatrized on the 5th of August. He articulated with considerable distinctness, and was by no means so much disfigured as might have been expected.

In this case the practice usually followed of removing the teeth which lie in the line where the bone requires to be divided was deviated from, and as it seemed with advantage, the division being completed without more than the ordinary difficulty, and the patient being saved from the pain necessarily attending the preliminary operation.

Before detaching the connection of the tongue, it was placed between the fold of a towel, and given to an assistant to hold. This prevents the disagreeable and alarming accidents which are apt to result from the organ being left to itself, when it falls back into the pharynx, and getting within the influence of the muscles of deglution, is pushed downwards with such force, as to obstruct the process of respiration,—give rise to violent convulsions, and even occasion death. Such seems to have been the cause of fatal termination in a case related by Dr

Meyer, Junior, of Zurich, in his thesis on extirpation of the lower jaw.\* The patient was a man of 50, who laboured under an extensive cancer of the jaw, which seems to have resembled Buick's. He died in the hands of the operator, (Langenbeck,) with symptoms of suffocation ; and no morbid appearance was found on dissection, except ossification of the pericardium. It is remarkable that the tendency to this displacement ceases very soon after the operation ; in five minutes or little more, subsiding so much as to render unnecessary any precaution, except keeping the head bent forwards ; and even this is sometimes not required.

*Ulcer of Nose.*—Elizabeth Ross, aged 28, married, was admitted on the 30th of June, on account of an ulcer about the size of a shilling, which was seated on the extremity of the nose, and threatened to spread, as its edges were ragged, and the surrounding integuments red. She stated that about fourteen months ago she applied to an accoucheur in town with some ailment of the external parts, for which he prescribed five dozen of pills ; that her mouth becoming very sore, she had recourse to a physician, who told her that the cause of all her distress lay in the teeth, and ordered out the two canines, and all the incisors of the upper-jaw ; not finding any benefit from this energetic practice, she came to the Hospital. The inflamed state of the nose was removed by a few leeches, and then the black wash was applied to the sore. Cicatrization soon commenced, and was speedily completed. She was dismissed on the 18th of July.

*Nervous Tubercler.*—Mary Comrie, aged 17, applied at the Hospital on the 23d of March, on account of a small moveable subcutaneous tumour, about the size of a large pea. It was seated a little below the middle of the left leg on its outer side. It was of very firm consistence, and adhered with its external surface to the skin. When pressed, it was moderately painful, but occasionally gave rise to paroxysms of the most exquisite suffering, far exceeding, though somewhat resembling, the severest toothache. These attacks lasted various periods, from half an hour to several hours, and were induced by slight external irritations, such as gentle rubbing—or mental agitations, such as sudden alarm ; but frequently commenced without any cause that could be perceived. It is remarkable that mental emotions were no less powerful in cutting short the fits than in exciting them. She had not perceived any difference at the menstrual periods.

She observed the tumour two years ago ; her attention being

directed to it by the pain; and when first noticed, it was as large as at any time afterwards.

The tumour when removed exhibited a pearly lustre externally, and possessed a dense cartilaginous consistence. The patient was immediately relieved from all her uneasy feelings.

*Cystic Sarcoma of Thigh.*—Dr Hatton asked me to remove a tumour from the thigh of a middle aged female, which had existed for a good many years; but lately increased so rapidly as to occasion her considerable uneasiness, and apprehension of worse consequences. It was about the size of an egg, seated on the posterior side of the limb, near the ham, and of an irregular tuberculated figure. Its colour was dark purple, and its consistency seemed to be of a fluid enclosed in distinct cells. Its neck was narrow, but extended into the subcutaneous fatty tissue; whence it was necessary to remove it by means of two pretty deep elliptical incisions. The tumour on dissection was found to possess the structure that had been anticipated.

### OUT-PATIENTS.

Abscesses,	.	102	Diseased synovial membrane of joints, 6
Amaurosis,	.	4	—— testicle, . . . . . 2
Aneurism of aorta,	.	1	—— teeth extracted, . . . . . 116
——— carotid artery,	.	1	Dislocation of humerus, . . . . . 4
——— by anastomosis,	.	5	——— elbow-joint, . . . . . 1
Anthrax,	.	10	——— finger, . . . . . 1
Aphthæ of gums,	.	14	——— femur, old, . . . . . 2
Atrophy of mamma,	.	1	Ectropium, . . . . . 2
Bronchocele,	.	2	Entropium, . . . . . 1
Bruises,	.	178	Effusion into knee-joint, . . . . . 5
Bubo,	.	6	——— bursæ, . . . . . 5
Bunion,	.	2	——— cellular substance 6
Burns,	.	46	Enlarged glands, . . . . . 20
Calculus in bladder,	.	4	—— tonsils, . . . . . 6
Cancer of mamma,	.	3	Epistaxis, . . . . . 1
——— cheek,	.	4	Erysipelas, . . . . . 51
——— eye,	.	2	Exfoliations, . . . . . 7
——— lip,	.	6	Furunculus, . . . . . 9
——— tongue,	.	2	Fissures of anus, . . . . . 1
Cancerous ulcers,	.	4	Fistula in ano, . . . . . 7
Caries of elbow-joint,	.	10	——— lachrymalis, . . . . . 3
——— wrist,	.	2	Foreign bodies extracted from hands
——— thumb,	.	2	and feet, . . . . . 7
——— fingers,	.	3	Fracture of lower jaw, . . . . . 1
——— knee-joint.	.	6	——— ossa nasi, . . . . . 2
——— ankle-joint	.	5	——— ribs, . . . . . 10
——— metatarsus,	.	2	——— clavicle, . . . . . 7
——— great toe,	.	1	——— scapula, . . . . . 1
Cataract,	.	6	——— humerus, . . . . . 9
Catarrh of bladder,	.	5	——— ulna and radius, . . . . . 2
Chilblains,	.	4	——— radius, . . . . . 4
Compression of brain,	.	1	——— ulna, . . . . . 2
Concussion of brain,	.	1	——— metacarpus, . . . . . 1
Curvature of spine,	.	2	——— phalanges, . . . . . 2
Cutaneous disease,	.	168	——— compound, . . . . . 8
Deafness,	.	6	——— ilium, . . . . . 2

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Fracture of femur,	.	10	Poisoning,	.	.	2
— patella,	.	3	Polypus nasi,	.	.	6
— tibia and fibula,	.	8	— auris,	.	.	1
— compound	3	3	Prolapsus ani,	.	.	1
— tibia,	.	4	— of uterus and bladder,	.	.	1
— fibula,	.	5	Pterygium,	.	.	1
— metatarsus,	.	2	Rachitis,	.	.	5
Fungus of testicle,	.	1	Retention of urine,	.	.	5
Ganglion,	.	5	Rheumatism,	.	.	59
Gonorrhœa,	.	22	Rupture of ligaments,	.	.	2
Gravel,	.	1	— tendo Achillis,	.	.	1
Hæmatocèle,	.	1	Sarcocele,	.	.	4
Hæmaturia,	.	1	Sciatica,	.	.	5
Hare-lip,	.	3	Scirrhous of mamma,	.	.	7
Hemorrhoids,	.	12	Sinuses,	.	.	20
Hernia reducible,	.	13	Sore throat,	.	.	37
— humoralis,	.	14	Sprains,	.	.	87
Horny excrescences,	.	1	Staphyloma,	.	.	2
Hydrocele,	.	10	Stricture of larynx,	.	.	1
Incontinence of urine,	.	5	— vagina,	.	.	1
Inflammation of absorbents,	.	2	— urethra,	.	.	5
— joints,	.	37	— urethra, with fistula in	.	.	
— veins,	.	7	perinæo,	.	.	3
Inversion of toe nail,	.	2	Syphilis,	.	.	29
Iritis,	.	6	Tumours,	.	.	11
Medullary sarcoma of tibia,	.	2	Ulcers,	.	.	233
— eye,	.	1	Ulcerated cartilages of knee-joint,	.	.	1
Morbus coxarius,	.	8	— — — — — ankle-joint,	.	.	1
Necrosis,	.	10	Varicose veins,	.	.	7
Nodes on skull,	.	2	Vertebral disease,	.	.	5
Onychia maligna,	.	4	Warts,	.	.	3
Ophthalmia,	.	101	Whitlow,	.	.	20
Ostitis,	.	15	Wounds, gunshot,	.	.	2
Otorrhœa,	.	7	— incised,	.	.	49
Paraphymosis,	.	2	— lacerated,	.	.	47
Partial paralysis,	.	29	— punctured,	.	.	23
Periostitis,	.	8		.	.	
Phymosis,	.	2		.	.	
Phlegmasia dolens,	.	2		.	.	
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## IN-PATIENTS.

Abscesses,	.	.	10	Caries of metatarsus,	.	1
— of mammæ,	.	3	— great toe,	.	.	1
Abscess psoas,	.	1	Cataract,	.	.	2
Amaurosis,	.	1	Catarrh of bladder,	.	.	4
Aneurism by anastomosis,	.	2	Compression of brain,	.	.	1
Bruises,	.	9	Cutaneous eruptions,	.	.	3
Bunion,	.	1	Diseased synovial membrane of joints,	6		
Burns,	.	9	— testicle	.	.	2
Calculus in bladder,	.	4	Effusion into knee-joint,	.	.	2
Cancer of cheek,	.	2	Erysipelas,	.	.	5
— lip,	.	6	Excoriation of throat from sulphuric	.	.	
— eye,	.	1	acid,	.	.	1
— tongue,	.	2	Exostosis,	.	.	1
Caries of elbow-joint,	.	8	Fissures of anus,	.	.	1
— wrist-joint,	.	2	Fistula lachrymalis,	.	.	2
— thumb,	.	2	— in ano,	.	.	7
— trochanters,	.	1	Fracture of ribs,	.	.	1
— tibia,	.	1	— clavicle,	.	.	2
— knee-joint,	.	1	— scapula,	.	.	1
— ankle-joint,	.	3	— humerus,	.	.	4

Fracture of radius and ulna, . . . .	1	Otorrhœa, . . . .	1
— phalanges, compound, . . . .	3	Partial paralysis, . . . .	1
— ilium, . . . .	2	Periostitis, . . . .	2
— femur, . . . .	9	Phymosis, . . . .	1
— patella, . . . .	2	Phlegmasia dolens, . . . .	1
— tibia and fibula, . . . .	6	Polypus nasi, . . . .	1
— tibia and fibula, compound, . . . .	3	Prolapsus ani, . . . .	1
— tibia, . . . .	1	Retention of urine, . . . .	1
— fibula, . . . .	3	Rupture of ligament of knee-joint, . . . .	1
Ganglion, . . . .	2	Sciatica, . . . .	3
Gonorrhœa, . . . .	2	Scirrhous of mamma, . . . .	3
Hare-lip, . . . .	1	Sinuses, . . . .	11
Hæmatocoele, . . . .	1	Stricture of larynx, . . . .	1
Hernia, reducible, . . . .	2	— vagina, . . . .	1
— humoralis, . . . .	2	— urethra, . . . .	1
Hydrocele, . . . .	10	— urethra, with fistula in perinæo, . . . .	3
Incontinence of urine, . . . .	1	Staphyloma, . . . .	2
Inflammation of joints, . . . .	12	Syphilitic ulcers, . . . .	8
— veins, . . . .	1	Tumours, . . . .	2
Iritis, . . . .	1	Tumour of antrum, . . . .	1
Medullary sarcoma of tibia, . . . .	2	Ulcers, . . . .	25
— eye, . . . .	1	Ulcerated throat, . . . .	2
Morbus coxarius, . . . .	3	Whitlow, . . . .	3
Necrosis of femur, . . . .	1	Wounds, incised, . . . .	8
— tibia, . . . .	1	— lacerated, . . . .	6
— skull, . . . .	1	— punctured, . . . .	4
Nodes on skull, . . . .	1		
Opacity of cornea, . . . .	2		
Ophthalmia, . . . .	3		
Ostitis, . . . .	3		
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### OPERATIONS.

Amputation of thigh, . . . .	5	Excision of mamma, . . . .	2
— at shoulder-joint, . . . .	1	— testicle, . . . .	2
— of arm, . . . .	2	— tumour from antrum, . . . .	1
— leg, . . . .	3	— tumours, encysted, . . . .	3
— through tarsus, . . . .	1	— warty excrescence, . . . .	1
— of thumb, . . . .	3	Fistula in ano, . . . .	5
— finger, . . . .	2	— lachrymalis, . . . .	2
— toes, . . . .	3	Hare-lip, . . . .	1
Artificial pupil, . . . .	1	Hæmatocoele, . . . .	1
Excision of aneurism by anastomosis, . . . .	1	Hydrocele, . . . .	9
— cancerous tumour of tongue, . . . .	1	Lithotomy, . . . .	4
— cheek and lip, . . . .	8		
— elbow-joint, . . . .	5		
— eye, . . . .	1		
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EIGHTH REPORT  
OF  
THE EDINBURGH SURGICAL HOSPITAL,  
FROM 8TH AUGUST 1831 TO 8TH FEBRUARY 1832.

BY JAMES SYME, ESQ. F. R. S. E.

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(*From the Edin. Med. and Surg. Journal, No. 111.*)

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3.  $\lim_{n \rightarrow \infty} f_n(x) = f(x)$  for all  $x \in E$ .

4.  $f$  is continuous at every point of  $E$ , i.e.,  $f$  is uniformly continuous on  $E$ .

5.  $f$  is bounded on  $E$ .

**R**EPORTS of hospital practice may be employed both to acquaint the profession with interesting facts, and also to communicate the author's opinions as to the treatment of disease. The former Reports of the Surgical Hospital have been written with the view of attaining both of these objects ; but as I have lately offered to the public a systematic work on the Principles of Surgical Practice, it will for the future be unnecessary to do more than state the remarkable features of the cases that may come under treatment. Hitherto these reports have been drawn out at the time to which they were brought up, whence it has repeatedly happened that imperfect accounts of cases have been given, and sometimes opinions stated as to their probable result, which have not proved correct. In the last one it was mentioned that an old man of 30, who had been cut for stone, was likely to do well. Such was the opinion then entertained by myself and pupils who had attended him ; but soon after the paper had gone to press, he suddenly died, three months after the operation. The young man Ford, too, whose case was related in the same Report, though he left the Hospital in greatly improved health, and with the prospect of recovery from the disease of his lungs, which had made us decline cutting out the elbow-joint, and hesitate as to performing amputation of the arm, died much about the same time with the last-mentioned patient. It therefore seems right to allow the longest interval to elapse between the date of the conclusion of the reports and their commission to the printer, that the arrangements of the Journal permit.

Since the date of last Report, 1254 cases of surgical disease have been presented at the Hospital. Of these 164 have been admitted into the house, and the remainder have been treated as out-patients.

#### OPERATIONS.

		Name of Patient.	Age.	Cured.	Cured.	Died.	Not
Amputation of thigh,	-	Alex. M'Kinnon,	34			1	(a)
	-	Alex. Clarke,	18	1			
	-	Andrew Ferrier,	35	1			
leg,	-	John King,	21	1			
	-	Margaret Mackenzie,	8	1			
	-	William Burnett,	26			1	(b)
finger,	-	David Lamb,	14	1			
	-	Robert Wilson,	30	1			
	-	John Welsh,	50	1			
	-	Helen Cameron, O.P.*	25	1			

\* Those marked O. P. were out-patients.

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Supernumerary fingers,	Anne Milne, O. P.	4	1 cur.	not cur. (c)
Amputation of toe, -	David Syme,	9	1	
- -	Thomas Dick,	23	1	
Cancer of cheek, -	Alex. Clarke,	77	1	
- lip,	James Brown,	24	1	
- -	John Graham,	52	1	
Excision of elbow-joint,	James Hastings,	10	1	(d)
fatty tumour,	Jane Lawson,	37	1	(e)
- -	Eliz. Rowan, O. P.	43	1	
mamma, -	Mrs Stratton,	57	1	(f)
- encysted tu-				
mours, -	Arch. Craig, O. P.	14	1	
- - -	Nugent Reynolds,	50	1	(g)
- - -	James Hutton, O. P.	22	1	
- - -	William Henry, O. P.	15	1	
- - -	Jane Lyall, O. P.	7	1	
testicle, -	David M'Naught,	48	1	(h)
tonsil, -	Isabella Massey,	13	1	
upper jaw				
bone, -	Betsy Lees,	28	1	(i)
excrecence of				
uterus, -	Mrs Mackenzie,	48	1	(k)
Ectropium, -	William Murray,	12	1	(l)
Entropium, -	Isabella Weepers,	18	1	
Fistula in ano, -	Thomas Gillespie,	36	1	
- -	Margaret Paterson,	23	1	
- -	James Trainer,	39	1	
- -	William Lawson,	24	1	
- -	James Millar,	23	1	
- -	Thomas Guthrie,	31	1	
- -	Robert Hastie,	22	1	
- -	Andrew Dowie, O. P.	55	1	
- -	W. M'Ghie, O. P.	34	1	
Hemorrhoids, -	Francis Gloag,	30	1	
- -	George Anderson,	27	1	
Hare-lip, -	Andrew Turnbull,	11 <sup>ms.</sup>	1	(m)
Hydrocele, - -	David Hunter,	70	1	
- -	James Russell,	30	1	
- -	Thomas Smith,	30	1	
of cord, -	James Kennedy,	24	1	
- -	John Burgess,	28	1	
- -	Duncan Knox,	48	1	(n)
Nævus maternus, -	Agnes Geddes,	10 <sup>ms.</sup>	1	(o)
Polypus nasi, -	David Thomson,	-	1	
- -	Thomas Wood,	15	1	
- -	Thomas Berry, O. P.	40	1	(p)
- -	P. M'Donald, O. P.	40	1	
auris, -	Andrew Robb, O. P.	19	1	
Warty excrescences, -	John Fleming,	42	1	(q)

(a.) M'Kinnon had for 17 years laboured under disease of the knee-joint. The bones were ankylosed, but a sinus which opened a little above the patella led directly down into a large carious cavity in the thigh bone. He was a very unhealthy-looking man, having the complexion and expression of countenance usually observed in persons who have suffered long from diseases of the bones ; and after his admission had repeated feverish attacks, at-

tended with dry brown tongue. It was evident that the only mode of affording him effectual relief was to amputate the limb; but the circumstances just mentioned rendered this proceeding very unpromising, both as to its immediate and also its secondary effects, in case the patient should escape the danger of the former. The operation, therefore, was not recommended, but left to the choice of the patient, who decided upon submitting. It was performed on the 14th of September, and though the cure was tedious, it seemed to be at length completed. He walked about on crutches, and would have returned home, but as it was at a great distance, he was detained in order that his strength might be increased sufficiently for supporting the fatigues of the journey. On the 1st of November he had an attack of fever similar to those which he experienced previous to the operation, but more severe, and sunk under it on the 14th.

A very similar case occurred about the same time, in which, if amputation had been performed, as the patient most eagerly desired, the result could hardly have been more satisfactory.

Peter Fortune, aged 32, had been afflicted with necrosis of the shaft and caries of the condyles of the thigh-bone for twenty years. He had been admitted into the Royal Infirmary when a boy; and the surgeons then declared amputation the only remedy, but declined to perform it on account of the height at which it would have been necessary to remove the limb. He presented himself at the Surgical Hospital on the 9th of August.

He was of small stature, and had a remarkably thin withered appearance. His hair was thin, and his shrivelled leathery-looking features exhibited the wrinkles of premature old age. Two days after his admission he had an attack of fever and erythema, from which he seemed to be recovering, having regained his appetite, and displayed other indications of convalescence, but relapsed on the 24th and died on the 29th. The pericardium was found distended with sero-purulent fluid, and coated with recently effused lymph.

(b.) Burnett was, if possible, a still more unfavourable subject for operation. For five or six years he had been constantly under medical treatment; at one time for chronic inflammation of the peritoneum—at another for palpitation of the heart—and for several months he had been an out-patient of the Hospital on account of disease in his foot, knee, and wrist. His general health became considerably improved, and his local complaints seemed also to be in the way of improvement, with the exception of his foot, which swelled to a great size, suppurated in several places, and when the matter was evacuated, the bones were felt extensively denuded. He complained of severe and incessant pain, which prevented him from sleeping, except when under the influence of the muriate of morphia.

In short, he felt persuaded that the disease would certainly prove fatal before long, and therefore desired to be relieved from it, whatever might be the danger of the operation. It was performed on the 24th of January. The tissues of the limb were observed to be soft and loosely connected. Great difficulty was experienced in arresting the hemorrhage. The stump sloughed. No effort at reparation took place after the dead parts separated ; and the patient, who preserved his appetite and confidence almost to the last, at length sunk under his sufferings on the 7th of February. On dissection, the peritoneum was found almost everywhere studded with small tubercles, and having its surfaces generally adherent. The lungs were thickly interspersed with small tubercles. The wrist was filled with pus ; and almost no part of the body presented the appearance of healthy structure.

(c.) These fingers, which were small and imperfect, adhered by a narrow filamentous-looking attachment to the integuments covering the ulnar side of the metacarpal bone of the little finger of each hand.

(d.) In this case of diseased elbow, the humerus was principally affected. The boy, who came from Arbroath, was admitted on the 16th of November. There was a large opening at the inner side of the joint, which led directly down to the bone. The elbow was much enlarged, stiff, and painful. The disease was referred to a fall sustained ten months before.

The operation was performed on the 22d. A large carious cavity was found to occupy the internal tuberosity and neighbouring part of the humerus, the whole of which part, together with the extremities of the other articulating bones, was removed by successive applications of the cutting-pliers. The patient suffered so little constitutional disturbance, that he could not without some difficulty be persuaded to remain in bed. The wound healed kindly ; and he would have made a very satisfactory recovery, had he not been exceedingly wilful, and obstinately resisted every effort to exercise the mobility of the uniting medium. The arm is nevertheless strong, and useful for all ordinary purposes : and there is reason to expect that the degree of motion will become much increased. The boy Arnot, who had his knee-joint cut out two years ago, and who on recovering from the operation, possessed hardly any mobility of the limb, which had been purposely kept still, is now able to bend the leg almost to a right angle with the thigh.

(e.) This tumour was seated on the upper and fore part of the arm, close to the axilla. It was about the size of the largest pear, which it also resembled in figure, and had existed for thirteen years. The patient had never suffered much inconvenience from it, until within a few weeks of her admission, which

was on the 22d of January, when a small superficial sore formed at the most dependent part of the tumour, and became the seat of unceasing intolerable pain. Though previously very averse to suffer an operation, and then unfavourably situated for undergoing one, being a nurse at the time, she readily consented to have the tumour removed, which was done without disturbing the secretion of milk. When a section was made through the sore and subjacent structure, a distinct but very superficial carcinomatous degeneration was observed.

(f.) This case was very unpromising, so far as regarded the appearance of the tumour. It was of a very large size, weighing, after its removal,  $4\frac{1}{2}$  pounds; unequal surface; purple colour; and very soft consistence at the most projecting parts. But there were other circumstances in its history of a more favourable character. It had existed fifteen years; there was no enlargement of the axillary glands; the tumour felt firm and quite circumscribed at its base; and the patient's general health was excellent. She was very fat, but active and vivacious. The operation was performed on the 11th of August, and the patient was dismissed nearly quite well on the 9th of September. The thickness of the adipose tissue rendered the recovery more tedious than it promised to be at first. She has enjoyed perfectly good health since, and there is not the slightest appearance, local or general, that would lead to the apprehension of a relapse. The tumour, when divided, presented the characters of medullary sarcoma; but the intersecting fibrous bands were firm and broad in proportion to the pulpy substance.

In November, I removed a similar tumour, weighing  $5\frac{1}{2}$  pounds, from Mrs F. aged 34. She was a little thin woman, which made the enlargement seem greater than it really was. It had existed upwards of seven years, and latterly increased very rapidly. It was very soft at the projecting parts, discoloured on the surface, and adherent to the pectoral muscle. There was no disease of the glands, but the tumour extended into the axilla, nearly to the clavicle. The base felt firm, tuberculous, and distinctly circumscribed. It was found necessary to remove a very large portion of the integuments, which were thin, discoloured, and adherent; and also a great part of both pectoral muscles, so that the cartilages of the ribs were completely denuded to a considerable extent. The tumour, when divided, displayed the characters of medullary sarcoma. The patient made an excellent recovery, and never suffered the slightest constitutional disturbance. She continues to enjoy perfectly good health.

The circumstances that encouraged me to operate in these cases were the slow progress of the disease, the good general health of the patient, and the firm, circumscribed base of the tumour. Being consulted lately by a lady who wished to be relieved from

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a small medullary tumour of the breast, I declined, because, though it was not adherent to the muscle, and there was no affection of the glands, the disease threatened to throw out a fungus, and no distinct outline could be felt at its base.

(g.) This man came all the way from Londonderry in the north of Ireland, on account of a small tumour under the edge of the jaw. It felt like an enlarged gland ; and the circumstance of his having had a sore extirpated from the lip, increased the probability of its being one. The equality of its surface and its mobility led me to entertain some doubts on the subject, and as the patient eagerly desired to be relieved from what was a constant source of uneasiness and apprehension to him, I cut out the tumour,—in doing which it was necessary to divide the facial artery ; it was then found to be a cyst containing a mixture of meliceratous and steatomatous matter, with small hairs interspersed.

(h.) This man was admitted on the 10th of December on account of a swelling which seemed to depend on hydrocele, but presented a remarkable peculiarity of figure, in so far that its longest diameter was transverse and directed from before backwards. In order to examine the state of matters more thoroughly, the fluid was drawn off by means of a small trocar. It was dark-coloured, and similar, the patient stated, to what had been withdrawn once before, though a clear fluid had previously been taken away. The testicle was much enlarged, and a distinct fluctuation was felt at its anterior part. Soon after he went to bed the scrotum began to swell, and in the course of four hours attained to more than double the size of a child's head. As it was then necessary to make a free incision to remove the effused blood, and apply the means for suppressing its farther flow, I thought it right, at the same time, to remove the testicle, the extirpation of which had been decided by the examination that had been made, and was delayed only until the necessity for its performance could be explained to the patient. No troublesome consequence followed the operation, and the patient was dismissed on the 18th of January. The testicle, when divided, was found to display a cystic structure, and the source of the bleeding proved to be an artery lying on the *tunica vaginalis*.

(i.) This woman came from Galashiels on the 24th of January to be relieved from a tumour of the upper jaw, which presented a formidable appearance. It was about the size of an egg, situated on the left side, and extended from the centre of the alveolar arch backwards. It elevated the cheek and depressed the palate. It had a soft consistence, and at the anterior part, where a puncture had been made in the country, protruded a small dark-coloured fungus. The patient was stout and healthy-looking.

This seemed a very proper case for cutting out the superior

maxilla, and the operation was accordingly performed on the 6th of February. Having exposed the anterior surface of the tumour by raising a flap from the cheek, I divided the nasal process of the maxillary bone, the connection with the malar, the septum of the nose (it being necessary to remove more than half of the palate) and lastly the palate, with cutting-pliers. I then attempted to depress and twist out the bone, but the morbid degeneration, which possessed the characters of medullary sarcoma, had rendered it so soft and yielding that the anterior half only came away. The condition of the patient was then truly alarming, since the hemorrhage was not only profuse, but threatened instant suffocation. There being no time for hesitation or gentle measures, I seized the remaining portion of the bone between the last grinders with a pair of strong pliers, and forcibly wrenched it out, together with the palate bone and pterygoid plates of the sphenoid, when a sponge having been thrust into the cavity, the patient was safe.

An hour after the operation hemorrhage occurred from the palatal artery on the *right* side, and rendered it necessary to undo the wound, and surround the vessel with a ligature passed under it through the palate by means of a curved needle. The cavity was then, as before, stuffed with pieces of caddis, and the edges of the wound stitched together, pins being introduced at the points where the two incisions of the cheek intersected the lip. Union by the first intention took place throughout the whole extent of the wound, and the patient might have returned home in a very few days. She remained, in order that we might observe the process of recovery a little longer.

At first there was œdema, and paralysis of the cheek, which rendered articulation and mastication difficult. The parts have now become very firm and contracted, so that there is hardly any deformity, or inconvenience of any kind, and she has gone home.

(k.) Dr Farquharson asked me to see this case. The tumour was the size of a uterus at the fifth month of pregnancy, which it very much resembled in appearance. It descended by a narrow neck from the uterus through the vagina, which, when carefully examined, seemed to be perfectly sound, and swelled out beyond the external orifice. At the fundus or lowest part there was an ulceration which threatened to slough. In other parts the tumour could be freely handled without causing pain, and felt of an equable and rather firm consistence. The patient first noticed the swelling three or four years ago ; it grew slowly, but could always be readily pushed back into the vagina when it protruded externally, until a week or two before, when she requested Dr Farquharson's assistance ; since then it had been quite irreducible, and become considerably larger.

Dr Mackintosh having concurred with Dr Farquharson and myself as to the propriety of removal, I performed the operation on the 25th of December. The woman being placed in a convenient position, I transfixated the neck of the tumour with a needle, and introduced a strong double ligature, one-half of which was tied above and the other below with all the force I could exert. When the needle was introduced, such a gush of arterial blood issued from each of the orifices, as showed the necessity of caution. There being now, however, no fear of any great hemorrhage, the neck of the tumour was cut through with a bistoury a little below where it had been tied. A small jet of blood towards the centre of the cut surface showed that the constriction did not operate there with sufficient force. The part whence it proceeded was therefore transfixated with a pin, round which a thread being tied, the bleeding was completely checked. The patient made no complaint during or subsequent to the operation; she felt quite well in a few days, and has continued so ever since. On examination, no trace of the tumour can be perceived. When divided, the morbid growth displayed the characters of simple vascular sarcoma.

(l.) In this case the upper eyelid was completely everted, in consequence of a lacerated wound which had extended from near the inner angle upwards to the forehead, and by its contraction during the process of cicatrization, caused the displacement which required remedy. The eyelid was again divided perpendicularly, nearly in the situation of the former wound, and the swollen everted conjunctiva being then cut away, the edges of the incision were placed in proper position, and retained together by a couple of stitches, after which a compress of cassis was applied, to afford additional support. He was dismissed with very little deformity remaining.

(m.) This case deserves to be mentioned as affording a useful caution. The patient had been brought to the Hospital some months previously, when his mother was instructed to return with him when he was weaned, and had cut his front teeth. The operation was performed as usual, and succeeded perfectly. The needles were taken out on the fourth day after it, and a strap of plaster was then applied, so as to approximate the cheeks, and prevent any strain on the recent union. Two days after this the mother became anxious to return home, and as the lip seemed quite firm, the strap was taken off, and permission given for her departure. In the course of the day, however, before she left the house, the child being seized with a fit of crying, a small fissure was formed at the margin of the lip, and notwithstanding the means immediately employed by the house surgeon to prevent its extension, soon reduced the lip to its original state.

(n.) The sac in this case being very small, not larger than a

small walnut, the treatment by seton was thought preferable to injection. A silk thread was passed through the anterior parieties, and allowed to remain until sufficient irritation seemed to be induced. The subsequent process of recovery was similar to that which occurs after injection.

(o.) The nævus was seated in the neck. It was round, of considerable thickness, and the size of a crown piece. It had repeatedly bled so profusely as to alarm the mother for the safety of her child, which was in other respects, though one of twins, healthy and thriving.

A long needle, slightly curved, was passed transversely under the base of the disease, and two threads introduced by it were then tied, so as to include one-half in each. As a small part of the disease slipped behind the thread, a needle was thrust under it, and held there until the ligature was drawn tight. No troublesome accident succeeded. The sloughs separated, and the ulcerated surface healed under the use of lotions containing the sulphate of copper, and the acetate of lead.

(p.) The patient, who came from Glasgow, laboured under a complete obstruction of the right nostril, though the anterior and upper part of the nasal cavity, so far as could be seen or felt, seemed nearly free. Having carefully groped backwards with a pair of small forceps, and extracted the small portion of polypous substance that was encountered, I at length detached a large round tumour which had hung backwards. It fell down into the pharynx, whence the patient spat it up, and was instantly relieved from all the annoyance he had previously suffered. A similar occurrence happened a short time before in private. In operating on a gentleman, whose nostril was completely obstructed, I found the passage so extremely narrow, that the smallest instrument could with great difficulty be either introduced or slightly opened, and I was about to despair of removing any thing more than a few small fragments, when the patient suddenly ejected from the pharynx a round mass fully the size of a walnut, and instantly felt quite well.

(q.) The patient was a respectable married man; a mason by trade. He applied on account of a great number of large warty excrescences which completely surrounded the anus, and presented a precisely similar appearance to that observed in aggravated cases of warty growths from the prepuce, and genital organs of the female. He had suffered great distress from the disease, and latterly was confined to bed by it. The excision of the excrescences was effected by means of curved scissors, readily but not very speedily, as they occupied a considerable breadth of surface all the way round.

The following cases, though they did not afford subject for operation, seem deserving of notice.

*Psoas abscess.*—Michael Calder, aged 14, came from Carnwath, near Lanark, last May, labouring under psoas abscess of both sides, and disease of the spine. On the right side the matter not only caused a swelling under Poupart's ligament, but could be felt distinctly fluctuating in a large cavity on the inner side of the ilium. The abscesses on both sides communicated freely, becoming more or less tense according to the position of the body. The lumbar part of the spine was painful when pressed or moved however slightly, and the patient exhibited that peculiarly stiff characteristic gait which is observed in persons labouring under disease of the spine, accompanied with or resulting from inflammation. He was thin and unhealthy-looking, and had been suffering from his complaint nearly a year. During the preceding autumn he had walked twenty miles for several successive days; soon after which the pain of his back commenced, and gradually increased. The swellings were observed in March.

The actual cautery was applied freely along both sides of the spinous processes at the pained part, and very soon after the discharge was established, he began to experience a remarkable change for the better. The spine was no longer painful when pressed; and he could not only move his limbs, but bend the trunk without any uneasiness. The tension of the swellings also was observed to be much diminished. In the middle of June I advised that he should be taken home to regain if possible his general health, and in case of doing so to be brought back, when the abscesses might be more safely evacuated.

He was re-admitted on the 2d of August, and had become so stout and healthy-looking that he could not be readily recognized for the same sickly emaciated creature we had previously seen. With the exception of the abscesses, which had suffered little alteration, he had now no complaint whatever. The right one was first evacuated by means of a trocar, and then the left one in the same way, but with the interval of three weeks; the wounds healed by the first intention. There still remained a slight degree of swelling on the right side; but as his health threatened to decline, he was again sent home, where he had not been long when one of the wounds opened and allowed the matter to drain off. He maintained his health, the running gradually diminished, finally ceased; and he is now in all respects perfectly well.

The result of this case, treated on the principle of not opening the abscess until the disease of the bone was subdued, contrasts very instructively with that of the following one.

William Brown, aged 23, was brought to the hospital on the evening of the 26th of August on a hand-barrow by two policemen, who stated that they had found him lying in the street. He was in the most wretched state that it is possible to imagine ; being exhausted to a shadow, and so weak that he could hardly move a limb, while he suffered from a frequent diarrhoea, severe pain in his back, and a profuse discharge of thin matter from an opening in the loins. He stated, that six months before, after being exposed to cold, he had begun to suffer from pain of the back, and soon afterwards observed a swelling in the loins. About three months after this, he had come to town in search of relief, being at that time able to walk fourteen miles a-day with ease. Two days after his arrival the lumbar tumour was opened by incision, and he had never afterwards been able to leave his bed. How, under these circumstances, he came at length to be found in the state above described, it is unnecessary to relate. He was admitted into the Surgical Hospital, and had every thing done that was possible to soothe his sufferings. But he died on the 4th of October.

*Sciatica.*—James Gibson, aged 38, farm-servant, from Currie, recommended by Dr Craig, was admitted on the 7th of January on account of sciatica in the left thigh and leg, which had afflicted him more or less for two years, but latterly rendered him unfit for any sort of work. He complained of constant stiffness, and occasional severe pain. One needle was introduced into the hollow between the *trochanter major* and tuberosity of the ilium, about two inches deep, and allowed to remain an hour. He did not afterwards feel any pain below the knee, and found the stiffness greatly diminished. A few days afterwards the needle was again introduced, and allowed to remain two hours. After this he felt in all respects quite well, and returned home.

Another case occurred about the same time, which was similar in the symptoms, treatment, and result.

*Dislocation of Spine.*—Alexander Robertson, aged 37, fell, 8th August, on a heap of rubbish, and, lighting on his posteriors, suffered a violent impulse of the trunk forwards. When brought to the Hospital, and placed in bed, it was observed that the spine formed an acute projection at the junction of its dorsal and lumbar portions ; and that at the summit of this projection there was a space nearly two fingers-breadth between the spinous processes. He complained of intolerable pain, which occasioned him to groan and scream almost without ceasing during the night after the accident. He could not expel his urine, and was unable to move his legs. He lay upon one side, and dreaded the slightest movement or pressure, which greatly aggravated his sufferings. On the 10th, his condition, which had been regarded as nearly hopeless, began to improve. He had

a natural evacuation of his bowels, and began to move his left leg. On the 11th, he passed his urine without the assistance of the catheter. On the 13th, he moved both legs. On the 16th, he turned himself in bed. On the 26th, he sat up in bed. On the 17th September, he was dismissed, being then able to walk with a stick. He is now only somewhat feeble. The spine has become much straighter, but still retains its convex form and separation between the spinous processes.

*Spontaneous Dislocation of Cervical Vertebrae.*—Peter Macneil, aged 16, had his leg amputated about two years and a-half ago. Owing, as he alleged, to a window being left open in the room where he lay after the operation, he caught cold, and felt a painful stiffness of the neck, from which he was never afterwards free. He gradually became unable to move his head on the vertebrae connected with it, in any direction, or in the slightest degree. He was not, however, confined to bed, but suffered almost constant pain. I was asked to see him last July, and proposed to apply the actual cautery. The friends consented, and were anxious to bring him to the Hospital, but while they were contriving some method of conveyance, he suddenly died. For two or three weeks previously he had complained of difficulty in swallowing.

On dissection the atlas was found firmly ankylosed with the occiput. Both bones were considerably destroyed by absorption, in consequence of which the process of the *vertebra dentata* had been detached from its connections, and become dislocated backwards, so as almost to obliterate the spinal canal, there being left merely a transverse slit, certainly not more than a quarter of an inch wide. It is probable that this contraction of the passage and consequent pressure on the *medulla oblongata*, had been increased immediately before death. But it appears from the slight degree of mobility permitted by the thickening and induration attending the disease, that this increase must have been very inconsiderable; and the preparation, which is preserved, affords a curious specimen of the extent to which the nervous tissue may be compressed *gradually*, without losing its power of functional action.

*Exostosis.*—Joseph Snodden, aged 14, from Tranent, was admitted into the hospital on the 1st of November on account of a severe bruise of the hand, which he had sustained in ascending a coal-pit, owing to some accidental derangement of the machinery. He was a healthy-looking boy, of fair complexion, and rather slight figure. Almost every bone in his body was found to be the seat of exostosis. The excrescences formed in most instances large tumours obvious to sight, in others they could only be felt. The largest were on the tibias, thigh-bones

and scapula. He did not complain of any pain or inconvenience on their account, and was not sensible of any recent change in their size or figure.

*Obstructed Urethra.*—In last report it is mentioned that William Swanston, aged 32, had been admitted into the Hospital on account of a complete obstruction of the urethra, which had resulted from a blow on the perineum, and existed 25 years. He is now quite well, and engaged in the country as formerly in the capacity of a farm overseer; but though his cure has been completed, I am persuaded that it would have been effected more speedily and easily on a different principle than the one which I pursued. Instead of making a free division of the obstructed part, and at once introducing a full sized catheter, I passed at first a very small instrument, and expected that the canal would dilate as in cases of stricture through means of a succession of larger ones. But it proved that an obstructed urethra could not be dilated on the same principle as a contracted one; and so little ground was gained by passing bougies, that I found it necessary to introduce a bistoury again, to divide the portion of septum that remained.

*Defective Vagina.*—Marjory Manson, aged 22, came to this city from Shetland on account of amenorrhœa, and various symptoms connected with it. She was treated for many weeks by a skilful physician with all the most approved emenagogues, but in vain; and being at length dismissed as incurable, she was seen by one of my pupils, who thought of examining the state of the organs more immediately concerned. He found an orifice in the ordinary situation of that of the vagina, which with difficulty admitted a finger, and when it was withdrawn a gush of urine followed. In short, it was ascertained that this opening led into the bladder, and that there was no vagina. She was admitted into the Hospital in order that a search might be made for it; but though something like the uterus could be felt through the coats of the bladder, no trace of the missing passage could be discovered.

2, *Forres Street, 6th March 1832.*



NINTH REPORT  
OF  
THE EDINBURGH SURGICAL HOSPITAL,  
FROM FEBRUARY TO AUGUST 1832.

BY JAMES SYME, Esq.

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(*From the Edin. Med. and Surg. Journal, No. 113.*)

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SINCE last report the Hospital has been considerably enlarged by the addition of a Lecture-room, which allows the apartment formerly employed for that purpose to be converted into a ward for the reception of patients. The contributions of the public have increased from L. 200 to L. 240 during the year terminating on the 8th of May last, which was the third from the commencement of the institution. The number of patients has also been much extended, notwithstanding the alarm of cholera, which it is known has operated in deterring them from leaving the country. 2548 persons labouring under surgical diseases applied for relief,—a number exceeding that of the preceding year by 555. Of these 340 were admitted into the house, the remainder being treated as out-patients. The tabular statement subjoined will show the particular affections for which application was made.

## OUT-PATIENTS.

Abscess,	.	139	Gonorrhœa,	.	.	52
Absorbents, inflamed,	.	1	Hernia humoralis,	.	.	12
Amaurosis,	.	2	——— inguinal	.	.	3
Anthrax,	.	2	——— femoral,	.	.	1
Aneurism by anastomosis,	.	1	Hæmorrhoids,	.	.	7
Aneurism of aorta,	.	2	Hæmaturia,	.	.	1
Aphthæ,	.	11	Hydrocephalus,	.	.	1
Anshylosis,	.	1	Hydrocele,	.	.	2
Anus, excoriations of,	.	1	Iritis,	.	.	2
Boils,	.	17	Inversion of nails,	.	.	2
Bruises,	.	228	Joints diseased,	.	.	31
Bronchocele,	.	1	Moveable cartilage,	.	.	2
Burns,	.	44	Medical,	.	.	14*
Bursæ, inflamed,	.	6	Mollities ossium,	.	.	2
Buboes,	.	15	Necrosis,	.	.	8
Cancer of lip,	.	3	Nodes,	.	.	5
Cataract,	.	3	Noli me tangere,	.	.	1
Chancres,	.	10	Œdema,	.	.	28
Concussion of brain,	.	8	Ophthalmia,	.	.	138
Calculus in kidney,	.	1	Ozæna,	.	.	1
——— in bladder,	.	1	Ostitis,	.	.	4
Curvature of spine,	.	2	Omalgia,	.	.	1
Cutaneous eruptions,	.	163	Opacity of cornea,	.	.	2
Dislocations of shoulder,	.	8	Onychia,	.	.	16
——— elbow,	.	1	Otorrhœa,	.	.	4
——— wrist,	.	1	Paralysis, partial,	.	.	26
——— thumb,	.	1	Prolapsus ani,	.	.	2
Dropsy of joints,	.	16	Periostitis,	.	.	17
Deafness,	.	11	Paraphimosis,	.	.	4
Delirium tremens,	.	1	Polypus nasi,	.	.	4
Epulis,	.	1	——— auris,	.	.	1
Erysipelas,	.	33	Rheumatism,	.	.	75
Epistaxis,	.	1	Retention of urine,	.	.	7
Exostoses,	.	12	Rachitis,	.	.	2
Fistula in ano,	.	4	Stricture of urethra,	.	.	4
——— lachrymalis	.	1	——— of rectum,	.	.	1
Foreign bodies extracted,	.	8	Sinuses,	.	.	6
Frœnum linguæ divided,	.	1	Scalds,	.	.	5
Fractured humerus,	.	5	Sciatica,	.	.	9
——— through neck,	.	4	Strains,	.	.	124
——— condyles,	.	4	Sore throat,	.	.	41
——— fore-arm,	.	4	Scirrhouss mamma,	.	.	2
——— radius,	.	18	Staphyloma,	.	.	1
——— ulna,	.	1	Superfluous fingers,	.	.	1
——— metacarpus,	.	4	Teeth extracted,	.	.	228
——— phalanges,	.	3	Tinea capitis,	.	.	35
——— thigh,	.	2	Tonsils, enlarged,	.	.	8
——— tibia,	.	2	Tumours,	.	.	13
——— fibula,	.	3	Ulcers,	.	.	268
——— metatarsus,	.	1	Varix,	.	.	8
——— ribs,	.	11	Warts,	.	.	6
——— clavicle,	.	5	Wounds incised,	.	.	74
——— nose,	.	1	——— lacerated,	.	.	9
——— lower jaw,	.	1	——— punctured,	.	.	34
Ganglion,	.	8				
Glands enlarged,	.	14				
						2208

## IN-PATIENTS.

Abscesses,	.	6	Amaurosis,	.	.	1
——— lumbar,	.	1	Anthrax,	.	.	2
——— psoas,	.	2	Bronchocele,	.	.	1

\* Medical cases, though often presented, from mistake of the patients, are not entered on the books, unless their circumstances are very particular.

Bruises,	.	.	17	Hernia strang. inguinal,	.	1
Buboës,	.	.	5	Hæmatocèle,	.	1
Burns,	.	.	6	Hypopium,	.	1
Cancrum oris,	.	.	1	Hydrocele,	.	12
Cancer of lip,	.	.	9	Imperforate vagina,	.	1
Cataract,	.	.	7	Iritis,	.	1
Chancres,	.	.	2	Inflamed varicose veins,	.	1
Concussion of brain,	.	.	5	Morbid growths of Arm,	.	2
Curvature of spine,	.	.	1	——— cheek,	.	1
Cutaneous eruptions,	.	.	6	——— face,	.	1
Cicatrix removed,	.	.	1	——— jaw, lower,	.	1
Diseased elbow-joints,	.	.	4	——— mamma,	.	6
——— thigh,	.	.	3	——— side,	.	1
——— hip-joint,	.	.	2	——— superior maxilla,	.	1
——— foot,	.	.	1	——— testicle,	.	2
——— tibia,	.	.	5	Nebula,	.	1
——— knee,	.	.	17	Nævus,	.	1
——— olecranon,	.	.	1	Necrosis,	.	6
——— wrist,	.	.	2	Œdema,	.	1
——— hand,	.	.	1	Omalgia,	.	1
——— back,	.	.	3	Onychia,	.	2
——— ankle,	.	.	4	Ostitis,	.	1
——— fingers,	.	.	2	Ophthalmia,	.	1
——— toes,	.	.	2	Paralysis,	.	2
Dislocation of elbow,	.	.	1	Polypus nasi,	.	1
Dropsy of knee-joint,	.	.	3	——— uteri,	.	1
Erysipelas,	.	.	8	Periostitis,	.	1
Erythema,	.	.	2	Ranula,	.	1
Entropium,	.	.	2	Retention of urine,	.	3
Ectropium,	.	.	1	Sciatica,	.	2
Enlarged humerus,	.	.	1	Sore throat,	.	2
Epistaxis,	.	.	1	Sinuses,	.	8
Exostosis,	.	.	1	Sprains,	.	8
Fistula in ano,	.	.	11	Stricture of rectum,	.	2
——— in perinæo,	.	.	1	——— of urethra,	.	3
——— lachrymalis,	.	.	2	Scalds,	.	4
Fractures of thigh,	.	.	7	Tic douloureux,	.	1
——— patella,	.	.	3	Tonsils enlarged,	.	2
——— tibia,	.	.	1	Twisted septum,	.	1
——— fibula,	.	.	2	Ulcers,	.	41
——— humerus,	.	.	1	Ulceration of nose,	.	2
——— back,	.	.	1	Warts on labia,	.	1
——— lower jaw, compound,	.	.	1	Wounds incised,	.	4
——— finger do.	.	.	1	——— lacerated,	.	6
Ganglions,	.	.	5	——— punctured,	.	2
Glands enlarged,	.	.	3	——— gunshot,	.	1
Gonorrhœa,	.	.	2	Warts on anus,	.	1
Hæmorrhoids,	.	.	6	Wry-neck,	.	1
Hare-lip,	.	.	1	Medical.	.	4
Hernia humoralis,	.	.	1			

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### OPERATIONS.

Amputation of hip-joint,	.	.	1	Excision of cancer of lip,	.	7
——— thigh,	.	.	4	Cataract,	.	1
——— below knee,	.	.	3	Fistula in ano,	.	11
——— partial of foot,	.	.	1	——— lachrymalis,	.	1
——— toes,	.	.	1	——— in perinæo,	.	1
——— arm,	.	.	2	Hernia, strangulated,	.	1
——— fore-arm,	.	.	1	Hydrocele,	.	12
——— fingers,	.	.	4	Hare-lip,	.	1
Excision of mamma,	.	.	4	Polypus nasi,	.	2
——— elbow-joint,	.	.	1	——— uteri,	.	1
——— fatty tumours,	.	.	4			
——— superior maxilla,	.	.	1			
——— testicle,	.	.	3			

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In regard to the period now under consideration, before proceeding to speak of individual cases, it may be well to make some remarks on the tendency to Erythema which has prevailed to a very unusual extent in this city during the spring and summer of the present year. As this term has been used to denote different morbid conditions, the precise meaning to be attached to it must be explained in the first place. It is admitted, that inflammation of the skin may either proceed directly from local irritation, or be preceded by constitutional disturbance, which seems to be its exciting cause. When of this latter origin, the inflammation is sometimes attended with a slightly swelled, smooth, red, glossy state of the skin, and terminates in vesication, followed by desquamation of the cuticle ; it is then named Erysipelas. On other occasions there is hardly any perceptible swelling,—the redness is of a lighter or rosy hue,—and there is no vesication ; when the disease may be designated Erythema. And, along with both of these forms of inflammation of the skin, proceeding from constitutional disturbance, the subjacent cellular substance may be affected, in which case there is considerable diffused swelling, and a risk of extensive suppuration or sloughing ; a complication which is expressed by prefixing Phlegmonous to the other titles. Cullen employed erythema to denote inflammation of the skin proceeding from local causes ; but it seems unnecessary to appropriate any term for this purpose, since less confusion would be occasioned were it in these circumstances simply styled inflammation of the skin. On the other hand, it is of great importance to distinguish the form of constitutional cutaneous inflammation, to which the term Erythema has now been applied, because there are here certain grounds of distinction which must be carefully attended to in practice.

Erythema does not show nearly so much predilection for the integuments of the head as erysipelas, and has a much greater tendency to spread, often leaving hardly any part of the body free from its successive attacks. It is usually preceded and accompanied by much more constitutional disturbance than erysipelas, and seldom, if ever, appears in a person on whose body there is not an ulcerated surface of more or less extent. It does not occur immediately after the infliction of incised wounds, but after the granulating process has been established,—sometimes not until the cure is nearly completed. It is preceded by severe, prolonged, and frequently repeated rigors, with bilious vomiting and headach. It commences often very insidiously by a small light-coloured redness at the edge of the sore, and then spreads so capriciously, as to render vain all attempts at calculation or anticipation. It is attended with a small frequent pulse, burning

heat of skin, insatiable thirst, nausea, a disposition to retch, loss of appetite, yellowish-white furred tongue, extreme general uneasiness, haggard brownish-yellow complexion, great bodily and mental weakness, and, in the progress of the disease, confusion of ideas, occasionally amounting to delirium. It is very tedious and distressing, but seldom fatal. Of the cases that occurred under my care during the last year, there were only two that did not recover. One of these has been mentioned in the preceding Report, viz. Mrs Buchanan, whose breast was removed at her own house; and the other was that of Mrs Grey, aged 72, who had a cancerous ulcer of the mamma cut out in the Hospital on the 16th of June. She had come from the country two days previously, and could not be persuaded to let the operation be delayed longer. Slight erythema of the breast followed, and was attended with bronchitis, to which she had been subject. She died on the 28th.

The treatment found to be most efficient in the first instance, is the administration of an emetic, which, if employed before the redness appears, often seems to cut short the disease. When the erythematous blush shows itself, little can be done to arrest its progress, and the great object is then to palliate the patient's sufferings, and support his strength, so as to prevent him from sinking under the disease. Bleeding, which is so useful in erysipelas, does not seem to be of any service, whether local or general. Opiates afford great relief from the pain and burning heat, and ought to be given frequently in moderate doses. The secretions should be promoted by calomel and the saline purgatives, and until decided indications of weakness appear, the diet of the patient should consist of little more than mild diluents to quench his thirst, and a little farinaceous food. Whenever the strength seems to be failing, whether this be in the advanced stages of the disease or at its commencement, owing to the previous weakness of the patient, nourishment and stimulants must be diligently supplied. Beef-tea, animal jelly, arrow-root, with wine, or spirits and water, are the best means for this purpose. It may finally be remarked, in regard to the treatment, that tartrate of antimony, which, when given internally, proves of so much use in erysipelas, does little or no good in erythema.

The predisposing cause of erythema is undoubtedly some peculiarity of the atmosphere; but this, though often resulting from bad ventilation, cannot be ascribed to it alone, since such an error was carefully avoided in the Surgical Hospital, and the disease occurred fully as often, in proportion, out of doors. It repeatedly happened that patients operated on in the Hospital escaped, while, at the same time, others suffered in vari-

ous well-aired parts of the city. Operations on the chest, such as those for removing the mamma, or dilating sinuses of the breast or axilla, were most frequently followed by the disease. It did not occur in any case of *fistula in ano*, but proved very troublesome in one of lithotomy. The gentleman who was the subject of it seemed on the fifth day after the operation to be nearly free from complaint, when he shivered, and a slight blush appeared on the left hip. It then attacked the right one, travelled round the loins and front of the abdomen, descended to the scrotum, and at length terminated its course by going down the limbs, thus prolonging his recovery to six weeks. Amputation was not followed by erythema, except in a few cases where the fingers were removed.

### *Diseases of the Mamma.*

Seven operations of excision were performed for diseases of the mamma, of which the following are the most remarkable. Margaret Turpey, aged 48, married, was admitted on the 18th of June, on account of disease in her left breast. The gland was considerably enlarged, hard, and heavy, but quite moveable. The tumour did not pass gradually into the surrounding parts, but was distinctly circumscribed. The axilla of the same side was filled with enlarged glands, which distended the skin, and were deeply rooted in the cavity. The patient complained of occasional severe pain in the breast. Her appearance was not unhealthy, and she stated that the disease had been noticed ten months before, having rapidly increased during the last five weeks.

This seemed to be one of those cases of Carcinoma which, though possessing the anatomical characters and symptoms distinctive of the disease in general, and presenting the unfavourable circumstances of rapid progress, together with affection of the glands, might, nevertheless, judging from the circumscribed form of the tumour, be regarded as not having a great tendency to malignant action. It was therefore thought right to remove the mamma, and the operation was performed on the 25th.

A section of the tumour showed the diseased structure adhering to, but quite distinct from the healthy tissue of the gland. It was dense, semipellucid at the edges, and of a pale brownish colour. It extended into the nipple.

The patient did very well for a few days, but was then attacked with erythema, which recurred again and again, reducing her strength to a very low ebb, and in fact rendering her case for some time apparently hopeless. At length she became convalescent, and then it was remarked that the axillary swelling had

entirely disappeared. She was dismissed on the 4th of August.

It has been thought right to relate this case particularly, with the view of directing attention to the diagnosis of the important difference between the diffused and tubercular forms of carcinomatous mamma. Margaret Dowell, aged 52, married, from Arbroath, was operated upon on the 7th April, under nearly similar circumstances, except that the disease was of longer standing, and made a good recovery, without suffering from erythema. She was dismissed on the 30th, and continues well. One of the first patients operated on in the Hospital was Janet Anderson. She had a tumour of the kind described in her right breast, and a glandular swelling of the axilla. The mamma was excised in May 1829. She continues well, and is now employed as a nurse in the house.

*Cystic Tumour of Mamma.*—Mary Paton, aged 44, from Anster, was admitted on the 24th of May on account of a tumour in her right breast. It was about the size of a turkey's egg, of very firm consistence, irregularly nodulated on the surface, and extremely moveable, so that it could be pushed freely about in all directions. The first appearance of swelling had been observed two years before, and within the last few weeks a great enlargement had taken place. The patient complained of a burning sensation in the tumour, and felt very uneasy from apprehension of its consequences.

Under the supposition that the growth was of a solid fibrous nature, excision was performed on the 28th, and as the mamma bore a small proportion in bulk to the diseased mass no attempt was made to save it. On the contrary, nearly the whole of the gland was taken away, partly to facilitate the operation, and also to prevent the trouble from hemorrhage, which is apt to be encountered when tumours are dissected *out* of the breast. The morbid formation proved on examination after removal to be composed chiefly of cysts; and, besides the principal mass, there were many small independent spherical bags interspersed in the surrounding glandular tissue, so that there was reason for congratulation on its free excision. The patient did well, with the exception of a slight attack of erythema, and was dismissed on the 10th of June.

*Chronic Abscess of Mamma.*—Janet Fisher, aged 36, from Lanark, admitted 31st July. Between the right mamma and ribs there was a tumour the size of an egg, having a convex somewhat irregular surface, and adhering immovably to the parts subjacent, though the gland felt quite natural and unconnected with it. The patient stated that for many months she

had felt pain in the side, and that the swelling had gradually appeared during the last six weeks. As an obscure feeling of fluctuation led to the idea that the tumour depended on the presence of fluid, an incision was made into it while the integuments and gland were drawn upwards, so as to render the intervening parts as thin as possible. An ounce or two of pus escaped, and the knife was again introduced, with the finger for a guide, to divide some partitions which were felt running partially across the cavity. No unpleasant symptom followed ; the discharge, though at first profuse, gradually diminished ; the parietes of the abscess became softer ; and she has gone home nearly well.

*Sinuses of the Mamma.*—Several very severe cases of this condition of the breast occurred, and were remedied without having recourse to the practice of free incision, which is regarded by many as essential to recovery ; all that seems necessary is to enlarge the sinuses with the knife, with sufficient freedom to prevent any obstruction to the exit of their discharge. Rubbing the hardened parts with camphorated-oil, and injecting occasionally a solution of the sulphate of zinc, together with carefully supporting the affected gland, if it be pendulous, promote the cure. Some of the patients came from distant parts of the country, believing that they laboured under malignant disease of the mamma ; but all got well with the assistance of the measures just mentioned.

#### *Diseases of the Face, Neck, and Jaws.*

*Cyst of the Thyroid gland.*—Mary Hamilton, aged 44, from Torphichen, applied at the Hospital two years ago, on account of a tumour in the neck, which was smooth, oval, elastic, and about the size of a goose's egg. It followed the motion of the larynx, and evidently depended on an enlargement of the left lobe of the thyroid gland. The patient complained of pain in the swelling, not constant, but frequent, and extremely severe ; and she could hardly tolerate the slightest pressure on it, as that made during the necessary examination of its consistence and connections. The tumour had existed for three years, and gradually increased.

Under the use of blisters and iodine, she obtained considerable relief, but still suffered great inconvenience from the disease. She presented herself on the 5th of April ; and then, as the swelling was not so morbidly sensible of pressure, a fluctuation was perceived in it. By means of a trocar, a quantity of clear serum was withdrawn ; and as the bag soon filled again, a seton was drawn through the anterior part of its parietes.

Little pain or swelling followed ; and the cord of cotton which had been introduced was taken out in the course of a few days. The inferior opening then healed ; and it was judged proper to enlarge the upper one with the knife, so as to admit the interposition of a piece of lint between its edges. She returned home on the 2d of June. There is still a little serous discharge, but no perceptible swelling or pain.

*Bronchocele.*—Margaret Welsh, aged 72, was admitted on the 18th of August, on account of a very large bronchocele. It nearly equalled the size of the head, possessed a firm elastic consistency, and had a very unequal surface, presenting large round irregular projections. It had existed for forty-two years. She was in the Hospital two years ago, since which the tumour had considerably enlarged. As blistering and iodine were freely employed formerly without material benefit, and as she suffered no inconvenience farther than from the weight and bulk of the swelling, except pain of the head from obstruction of the circulation, which admitted of relief from the application of a few leeches, it was not thought proper to propose any active measures of treatment.

*Medullary Sarcoma of Lower Jaw.*—Adam Mather, aged 57, from Alnwick, applied on the 2d of May, on account of a tumour of the jaw, which at first sight seemed a very favourable subject for excision. It extended from the *symphysis* to the *ramus*, elevated the integuments in the form of a large round swelling, and encroached inwards considerably on the cavity of the mouth. The grinders were loose and imbedded in the substance of the growth, which possessed a soft consistence. The patient stated that the tumour had appeared about two months before—that it was at first external to the jaw, and moveable—and that it had increased very rapidly of late. He complained of great pain, which was particularly severe at night. His countenance had a doughy unhealthy appearance.

Though there did not seem any impossibility in removing the whole of the disease, it was not judged expedient to make any attempt with this view, as the extreme rapidity of growth, and tendency to spread, together with the patient's appearance, rendered any permanent benefit from such an operation quite hopeless. The integuments of the cheek soon became adherent to the tumour, acquired a purple colour, and seemed on the point of ulcerating or sloughing. Instead of this an opening took place into the mouth, and discharged incessantly an immense quantity of exceedingly fetid matter. The whole side of the face affected became oedematous; the pulse intermittent; and sick fainting fits repeatedly threatened immediate dissolution. The

patient felt a great desire to return home, and accordingly did so on the 13th of June.\*

*Cancer of the Face.*—Elizabeth Rich, aged 64, from Stromness, in Orkney, John Macdonald, aged 46, from Helmsdale, in Sutherlandshire, and Alexander Beaton, aged 36, applied on account of cancer, originating in the lip, and extending to the jaw bone. In all of these cases it would have been necessary, in order to extirpate the disease, to take away not only the whole of the integuments of the chin, but also the front part of the jaw; and there seemed so little encouragement to undertake this severe operation, when the rapidity of the morbid process, the unhealthy appearance of the patients, and the tendency to glandular enlargement observed in them were taken into consideration, that no attempt of this kind was proposed.

*Abscess of Antrum.*—Mary Burns, aged 29, applied on account of severe and incessant headach. It was observed that the right maxillary bone was very much enlarged, so as to protrude the cheek and depress the palate, whence the roof of the mouth, instead of being arched, was gutter-shaped. She had occasionally a discharge of offensive matter from the nose, but suffered no other inconvenience from the disease, and could not without difficulty be persuaded of the origin from which her complaints proceeded. A stump that occupied the place of the second bicuspid tooth was extracted, with the view of ascertaining the state of the antrum, and a quantity of fetid pus immediately escaped. A few days afterwards, as the symptoms were not materially relieved, a larger aperture was made into the cavity by separating the cheek from the gum, and breaking down the thin shell of bone that constituted its anterior wall. The patient then gradually ceased to suffer from the pain in her

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\* The tumours of the jaw which afford the most favourable opportunities of performing excision of the bone, are those in which the morbid growth is of a fibro-cartilaginous nature. Perhaps the most remarkable case of this kind is one that occurred lately in the practice of Dr Martin of Chatham, who was kind enough to send me the preparation. It was removed after death, which happened four years from the commencement of the disease, in consequence of repeated hemorrhage. It weighed eight pounds, and protruded out of the patient's mouth in a mass that measured at its neck twenty-one inches in circumference. The bone was enormously expanded, so as to form a sort of shell under the tumour and numerous septa, in the interstices of which lay a white, tough, elastic fibrous substance constituting the great bulk of the excrescence. The patient was a female twenty-four years of age; and it is much to be regretted that an operation was not performed before the disease had gone too far, as, in all probability, the cure would have been permanent. The jaw of which the removal is related in the 97th number of this Journal, was precisely similar in all respects, except that it weighed only four pounds and a half, and the patient continues quite well, masticating and articulating perfectly, and having nothing very disagreeable in his appearance.

head, and the maxillary bone has already advanced considerably in the return to its natural size.

*Polypus of the Nose.*—William Donaldson, aged 14, from Coldstream, was admitted on the 4th of August on account of a large polypus in the left nostril, which descended into the pharynx so as to project considerably below the margin of the palate. It occasioned great difficulty of articulation, and when he slept threatened suffocation, his respiration being then so noisy and irregular, and executed with such violent struggles, that no one could witness it without alarm. He had repeatedly lost large quantities of blood from the nose since the commencement of the disease, which was about eight months previous to the time of his application.

The loop of a doubled silver wire was introduced through the nostril into the pharynx, and passed round the excrescence. The ends of the wire were then passed through a small silver double cannula, and tightened with moderate force, after which they were fastened to the wings of the instrument. The patient suffered no great inconvenience. Each succeeding day one of the ends was disengaged and pulled tighter, and on the seventh day after the wire was applied, the cannula came away with hardly any appearance of the loop remaining. The polypus still continued in its place, but when seized with a hook, readily came away and was extracted through the mouth.

*Fibrous Polypus of the Nose.*—Thomas Wood, aged 15, from Gifford, entered the Hospital last January on account of a polypus in the right nostril, which could be seen by looking into the nose, and felt by introducing the finger behind the soft palate. It had existed for several months, and was increasing rapidly. From an attempt, which was made soon after his admission, to effect the removal of the tumour by extraction, it was ascertained that it possessed the firm fibrous structure that has been particularly remarked and described by M. Dupuytren.\* It could be torn longitudinally, but resisted efforts to rupture it transversely no less obstinately than if formed of tendon, and bled most profusely when injured. In accordance with the conclusion of M. Dupuytren, that this kind of growth is certainly and speedily fatal if allowed to proceed, and that the only method of effectually eradicating it is evulsion, various attempts were made to force the polypus away, both by the nose and mouth. Forceps with strong blades and projecting teeth were constructed for the purpose, and the nostril was slit open to permit their more effectual application. Nothing but some

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\* Sabatier, *Medecine Operatoire.*

small shreds could be extracted, and it was at length ascertained that the attachments of the tumour were so extensive as to render the operation quite impracticable. In these circumstances the patient was dismissed, the nostril having healed without leaving any trace of its division.

He returned on the 12th of August much reduced in strength and altered in his appearance. The polypus presented itself both beyond the nose and palate, and he had repeatedly lost considerable quantities of blood. It was now evident, that, unless the disease were removed, he must speedily sink under it, and the urgency of the case seemed to warrant the severest measures. It had been ascertained that the attachments extended all the way round the posterior margin of the nostril, and there was reason to suppose, that, if the superior maxillary bone was removed, they would be rendered accessible. This operation was accordingly performed on the 21st, in the manner described in last Report, and without any difficulty except what proceeded from the resistance of the patient, who lost all command of himself. After the bone had been removed it required very great force to disengage the tumour from its connections. It was taken out perfectly entire, and measured four inches in length, two and a half in breadth, and one and a half in thickness. The superior palatine artery was the only deep-seated vessel that required to be tied. The cavity was filled with pieces of lint, and the edges of the wound were stitched together. On the evening of the day succeeding that of the operation, as the patient's pulse was full and frequent, and his breathing difficult, twelve ounces of blood were taken from his arm. On the following day his breathing was easy, the wound looking as if about to heal entirely by the first intention ; he took his food, and seemed doing quite well. On the morning of the next day a patient in the same room spoke to him at 5 A. M. when he said he felt quite comfortable. At 6 he was found to be dead.

On dissection the unexpected discovery of another polypus was made. It originated from the left nostril, and adhered not only to the whole of the upper and lateral margin of its pharyngeal opening, but also to the base of the skull. It no doubt escaped observation at the time of the operation from having been pressed out of reach by the larger one, and had probably enlarged subsequently, as well from being no longer compressed, as from the irritation which it necessarily suffered. This polypus could not have been eradicated, so that the only subject of regret in regard to the operation is, that it was undertaken at all. The hopeless state of the case, and the well ascertained fact that fibrous polypus exists almost invariably not in numbers, as the softer ex-

crescences from the nasal cavity do, but singly, will, it is hoped be regarded as a sufficient justification of the attempt. No other morbid appearance could be perceived, so that the cause of his death is rather obscure.

*Melanotic Tumour of Eyelid.*—Christian Wilson, aged 65, from Anster, was admitted on the 21st of August on account of a dark-coloured sloughy-looking tumour about the size of the half of a small orange, which concealed from view the right eye, unless held up, when it was seen to grow from the margins of the eyelids, occupying about a half of the upper, and a third of the lower one, from the outer angle. A small tumour of fleshy appearance lay near the superior *punctum lacrymale* of the same eye. The patient stated that the disease commenced eight years ago, and that it had been twice removed, once when little larger than a pin's head, and again when nearly as large as at the time of her admission. It bled freely when touched.

The tumour, together with the portions of the eyelids to which it adhered, was removed by means of curved scissors. The smaller excrescence near the inner angle was excised in the same way. Two arteries were tied, the cut edges of skin and conjunctiva were stitched together, and cloths wet with cold water were then applied. A section of the morbid structure displayed the characters of melanosis.

#### *Diseases of Urinary and Genital Organs.*

*Stricture of Urethra.*—James Buchanan, aged 35, from Forfarshire, applied at the Hospital on the 9th of June, in the belief that he laboured under stone in the bladder. The symptoms were more indicative of stricture than stone, and a very tight one was discovered at the bulb. He had been complaining for two years. The ordinary treatment of dilatation by steel bougies introduced for a few seconds every third or fourth day soon restored him to perfect health, and he was dismissed on the 28th of June. Several other cases of the same kind were treated in a similar manner, and with a similar result.

*Calculi cut out of the Prostate.*—This case, though it occurred in private, may be mentioned on account of its rarity. The gentleman who was the subject of it had for more than a year suffered from pain, and frequent desire to make water. His age was 19. A bougie being introduced, detected a small concretion in the prostatic portion of the *urethra*. The canal was dilated to permit its escape, but in vain, as the calculus could not be brought farther forward than the membranous part. Attempts to seize it with forceps proved equally unsuccessful. An incision was therefore made in the *perineum* on a grooved staff,

so as to open the canal a little anterior to the prostate. Two calculi the size of small beans, and of a very irregular figure, were then readily extracted. A sound being passed, occasioned a grating sensation in the prostate; and on examination with the finger a calculus was felt lying in a pouch of the left lobe of the gland. Dilatation having been effected with a bistoury, first one and then a second concretion was removed. The sound was now passed, and again grated on a rough surface, which led to a careful examination of the right lobe. A calculus, felt through a small opening, was, after requisite dilatation by the bistoury, removed with the forceps. The wound was perfectly healed at the end of ten days. The three last-mentioned concretions were extremely rough, and appeared to be formed of crystallized triple phosphate of magnesia and ammonia. They were nearly of the same size as the two first extracted.

*Hæmatocele.*—James Macleod, aged 48, from Peebles, entered the Hospital on the 3d of March, with the view of being radically cured of a very large hydrocele. The testicle had been bruised twenty-eight years previously, but occasioned him no particular uneasiness. Two years ago the collection of fluid formed, and had since been evacuated twice. Its colour was darker, and it returned more rapidly on the latter of these occasions than the former. There was no translucency.

The swelling was tapped, and sixteen ounces of dark-brown fluid drawn off. The testicle was found to be much enlarged, irregular, and unequal in its consistence. The tumour had very nearly regained its former size in the course of a day or two; but the patient being averse to suffer a more severe operation than he had contemplated, left the house and went home. He returned on the 17th of April, willing to submit to anything that might be judged proper. The *tunica vaginalis*, with the testicle and its other contents, was removed on the 23d, and, with the exception of a troublesome tendency to diarrhoea, he made a good recovery.

The spermatic artery was carefully injected with size, to discover the source of the bleeding, which had occasioned the disease. On dissection, the minutest branches were found to be filled, so that there was hardly a point throughout the whole extent of the membrane where they did not appear, but no extravasation had taken place internally, whence it was concluded that the bloody effusion had proceeded from the capillaries. The testicle was degenerated into cysts, the lining membranes of which were exceedingly vascular.

*Medullary Sarcoma of the Testicle.*—A testicle was remov-

ed in the case of a private patient which deserves to be noticed. The patient was 24 years of age, and had suffered three or four years from the disease. It had increased latterly with great rapidity, and at length constituted a large irregularly shaped mass, nearly the size of a person's head. There was no perceptible affection of the glands, and though the patient was weak, and his pulse very quick, there seemed to be no doubt as to the propriety of removal. The tumour weighed four pounds and a-half, and a section of it showed a medullary structure unusually soft and bloody. The wound healed, but the patient did not gain strength ; his pulse continued very quick ; a tumour appeared over his breast ; and he finally sunk under his sufferings, about two months after the operation.

*Accidents and Disease of the Bones and Joints.*

*Lateral Dislocation of Elbow-Joint.*—The patient was a boy who fell on his side from the back of an ass four days previous to the time of his application at the Hospital, which was the 7th of May. The arm was half-bent and pronated. It was preternaturally moveable transversely outwards. The internal tuberosity of the humerus had been detached, but was still unusually prominent ; while the external one could not be felt, being concealed by the head of the radius which projected beyond it. Extension and counter-extension, followed by flexion of the fore-arm, and attended with pressure on the head of the radius, readily effected the reduction ; and a figure of 8 bandage was then applied to prevent displacement. The patient suffered no farther trouble from the accident, and regained the perfect use of his arm.

*Fracture of the Neck of the Thigh Bone.*—An old woman, aged 72, last December, fell upon her side and sustained a fracture within the capsule of the hip-joint. She was treated by means of the long splint, and lay in bed eleven weeks. She is now able to walk without the assistance of a staff, and with hardly any perceptible inequality of the limbs. Other cases of the same kind have terminated no less satisfactorily ; and while the question as to the possibility of osseous union within the capsular ligament still remains undetermined, the important fact should be recollected, that, if the fracture be kept in proper position, such a degree of firmness will often, perhaps generally, be regained, whether by cartilaginous, ligamentous, or osseous junction is immaterial, as to render the limb serviceable, and prevent the distressing deformity and lameness which result from the practice of doing nothing for the patient's relief.

*False Joint of the Fore-Arm.*—William Paterson, aged 32, from Currie, about nine months ago, had both the bones of his

left fore-arm broken at about their middle by the kick of a horse. He had the limb put up in splints, and continued without a single day's interruption his employment as a carrier. Union by bone has not taken place, and he applied for relief on this account. The arm could be bent with great freedom both forwards and backwards while the muscles were relaxed ; but when he exerted them, the limb became firm enough for all ordinary purposes. He was even able to use the scythe and pitch-fork. In these circumstances he was advised against submitting to any operation for rendering the union complete.

*Medullary Sarcoma of Bone.*—Cases of this disease occurred in which the Frontal bone, Sacrum, Femur, and Ulna were affected ; but the last of these alone was subjected to operation.

Archibald Macleod, aged 44, admitted on the 30th April, about seven years ago, had both bones of the left fore-arm broken, rather below their middle. He suffered no inconvenience from this injury after the fracture was united, until two or three years afterwards, when he began to feel deep-seated pain in the limb. Two years previous to the time of his applying at the Hospital, a swelling appeared on the outer side of the arm, and increased with accelerating rapidity, so that at length he observed a difference in its size almost daily. The tumour occupied the situation of the *ulna*, and extended from within an inch of the *olecranon*, half-way down to the wrist. It was of an oval figure, and semi-fluctuating consistence ; but, nevertheless, felt tense on the surface, which was somewhat unequal. It was not discoloured, but the cutaneous veins were considerably enlarged. He complained of incessant pain, similar to toothach, which was particularly severe during the night. His appearance indicated no great disturbance of general health.

A bad opinion was formed of the case ; but to satisfy the patient, cupping, blistering, and pressure, together with iodine ointment, were tried in succession. The two first of these means considerably diminished the pain for a time ; and the last mentioned produced a remarkable effect on the bulk of the tumour, which was reduced an inch in circumference. These symptoms of amendment were very transitory ; and at length the patient himself proposed amputation. The operation was performed by double flap, on the 18th of June ; and he left the Hospital on the 11th of July. He continues quite well. On dissection, the tumour was found to consist of a mass precisely resembling one of the hemispheres of the brain in consistence and colour, and also somewhat in shape and size. It originated from a cavity in the substance of the *ulna*, the edge of which was a little expanded by the effusion of osseous matter.

*Thickening and Ulceration of the Ulna in consequence of Injury.*—Jane Paton, aged 20, from Inverkeithing, was admitted on the 8th of July, on account of a very formidable-looking sore of her left arm. The ulna was greatly thickened from within an inch of the wrist to the same distance from the elbow. The integuments were irregularly ulcerated at the centre of the swelling, and allowed a probe to pass into the substance of the bone, which felt as if disintegrated or granular. She stated, that eight months previously a cow had kicked her on the arm, since which the morbid appearances which have just been described gradually presented themselves, attended with pain almost constant, but more or less severe at different times. She seemed to be otherwise in good health, and declared that she had never taken mercury.

Ulceration of a dense bone, preceded by expansion of its texture, in consequence of irritation proceeding from external violence, generally proves extremely obstinate, and requires the treatment proper for caries; but before employing any severe measures in this case it was thought right to try the effect of blistering, which is so useful in similar affections of dense bones resulting from constitutional disorder. Two large blisters were accordingly applied in succession, after which the sore was dressed with black wash. She improved slowly but steadily; and was dismissed quite well on the 24th of August.

*Excision of the Head of the Humerus.*—James Somers, aged 36, presented himself at the Hospital on the 1st of June, on account of an abscess over the anterior part of the right deltoid. He had complained of pain in the joint for fifteen months previously, but could not assign any cause for the disease. The abscess was opened, and found to contain thin serous-looking fluid, with large masses of yellow substance, resembling coagulable lymph in the form in which it is effused from serous surfaces. The patient again applied on the 6th of August, when his appearance was so much altered that he could not have been readily recognized. He was thin, pale, and evidently exhausted by continued suffering. A sinus remained where the abscess had been opened, and a profuse thin discharge issued from it. The shoulder admitted of very little motion; when either moved or pressed, it was extremely painful; and, independently of such excitement, there was always an uneasy sensation in the limb shooting from the shoulder to the elbow and fingers, which during the night was so distressing as to deprive him almost entirely of sleep. The arm appeared longer than the other, but when measured, was found to be of the same length. A probe could be passed readily in various directions

under the integuments, and also after some searching into the cavity of the joint, where it encountered a rough surface of the bone.

As it appeared that the removal of the diseased bone was the only measure adequate to afford the patient relief, and as he had no objection to suffer whatever was thought necessary, the operation of excision was performed on the 21st of August. An incision was made from the opening of the sinus downwards, nearly in the direction of the fibres of the deltoid muscle, about four inches and a-half long, and from the lower extremity of it another was carried upwards and backwards to the extent of two inches and a-half. The flap thus formed was dissected up so as to expose the joint, and then, as there was considerable bleeding from various small arteries, a few ligatures were applied. The capsular ligament was destroyed by the disease at its upper part, but remained entire at the sides, where it was next divided, together with the attachments of the scapular muscles. The head of the humerus being now turned out, was nearly cut through by the saw below the tuberosities, and completely detached by means of the cutting forceps. The cartilage was considerably eroded, and several carious excavations of the bone existed at the upper margin of the articular surface. The glenoid cavity of the scapula seemed perfectly sound, and therefore was not removed.\* The edges of the wound were stitched together, and supported by a spica bandage.

The patient suffered hardly any constitutional disturbance from the operation. He sat up for several hours on the fourth day after it; and has now the prospect of being soon restored to health.

*Moveable bodies in an enlarged Bursa.*—A house-maid, aged 36, had a large swelling over the ligament of the patella. It was punctured, and found to contain, along with some fluid, no fewer than 3000 small white bodies, pretty similar in figure and size to coriander seeds. There can be no doubt that they proceeded from the effusion of lymph into the cavity, but it is difficult to imagine how they came to be all so exactly similar in shape and size.

\* In Christian Laing's case, (No. 88 of this Journal,) where the head of the humerus excised was completely excavated, the glenoid cavity did not require removal. Six years have now elapsed since the operation, and she continues perfectly well, using both arms so equally that it is difficult to perceive any difference between them.

TENTH REPORT  
OF  
THE EDINBURGH SURGICAL HOSPITAL,  
FROM AUGUST 1832 TO FEBRUARY 1833.  
BY JAMES SYME, Esq.

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(*From the Edin. Med. and Surg. Journal, No. 115.*)

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THE number of patients who have applied at the Hospital since the date of last report is 1202, 128 have been admitted into the house, and the remainder treated at home. There have been eight deaths in the Hospital from the following causes:—

*Apoplexy*.—John Macpherson, aged 55. Admitted on account of *paronychia*.

*Ruptured Intestine*.—David Wilson, aged 20.

*Pleurisy*.—Robert Macready, aged 19. Admitted on account of axillary abscess.

*Hydrothorax*.—Mary Guy, aged 50. Admitted on account of incurable carcinomatous *mamma*.

*Phthisis*.—James Porteous, aged 32. Admitted on account of *phimosis*.

*Fracture of the Cranium, with wound of the Brain*.—Niel Mackay, aged 28.

*Inflammation of the Bowels*.—John Walker, aged 25. Admitted on account of ulcer of the leg.

*Burn*.—Janet Mackintosh, aged 7.

Before proceeding to notice particularly the cases that have

occurred within the period to which the present report refers, it seems right to mention, that the excision of the shoulder-joint related in the last one has not terminated favourably. The patient, though he suffered little from the operation, did not recover from the bad state of health which existed previously to it. On the contrary, he became thinner, and more haggard-looking, his voice sounded hollow, and he suffered from frequent cough, muco-purulent expectoration, and night-sweats. The wound healed by the first intention, with the exception of an old sinus, which often seemed on the point of closing, but never did so completely. He died at home on the fourth month after the operation. On dissection, the lungs were found cavernous and hepatised throughout. The end of the *humerus* was sound, but the *scapula* displayed several carious parts in the line of the inferior *costa*. It is hardly necessary to observe, that the result of this case affords no argument against the operation of excision, as amputation could not, under the local and constitutional circumstances of the patient, have had a more successful issue.

In relating the following cases it may be convenient, for the sake of reference, to arrange them according to the part of the body affected.

#### *Head and Neck.*

##### *Fracture of the Skull, with Abscess of Brain and Epilepsy.*

—William Kilgour, aged 22, from Dunfermline, admitted 3d September. Between six and seven years ago he suffered a very severe wound of the face from the blasting of a rock. He was at first insensible, and considered in a hopeless state, but gradually recovered so as to be able to follow his employment of a weaver. A small opening, however, between the cheek-bone and ear continued to discharge matter, and he occasionally suffered much pain in his head. During the last four months he had had occasional epileptic fits. On examination, it appeared that the malar bone had been fractured ; and the whole upper part of the face was occupied by a dense cicatrix. A piece of bone was felt at the bottom of the sinus, bare, and lying obliquely in respect to the surface of the skull. On the supposition that this was a portion of the cranium, which had been depressed at the time of the injury, a crucial incision was made through the cicatrix, to expose the aperture of the skull, which was then enlarged by means of cutting-forceps, so as to admit the extraction of the loose piece. It comprehended both tables of the bone (temporal,) and was about third the size of a sixpence. The patient expressed much relief after the operation ; but the fits still recurred, though seldom ; and a profuse discharge issued from the wound. A probe being gently introduced, entered to the depth of two inches perpendicularly,

the substance of the brain seeming to have been hollowed out into an abscess. He returned home, and continues in the same state, though, on the whole, improved.

*Punctured Fracture of Cranium. Recovery without Operation.*—Edward Cochrane, aged 18, August 19, applied on account of a small punctured wound of the scalp, in the centre of the coronal region, which he attributed to striking his head on a beam of wood above him, about a week before. On introducing a probe, it was found that a perforation existed in the bone ; and when the instrument was withdrawn, some matter issued, apparently from under the skull. He was taken into the Hospital, in order that the symptoms which seemed likely to occur might meet with timely attention. In a few days he began to complain of headach, with loss of appetite, while a frequent pulse, foul tongue, hot skin, and increased discharge from the aperture, afforded still stronger evidence of irritation of the *dura mater*. It was then proposed to remove the injured bone by means of the trephine ; but this the patient declined ; and he insisted upon leaving the house. Two days afterwards he sent for me, finding himself getting worse, and desiring to have the operation performed. For this purpose, he returned to the Hospital on the following day. He then seemed somewhat better ; and it was thought right to delay. He progressively improved afterwards, was dismissed on the 10th September, and has continued well ever since.

*Fracture of Cranium, with Wound of Brain and Hernia Cerebri. Fatal.*—Neil Mackay, aged 28, December 8th, was admitted at midnight, two hours after having been knocked down in the street, seriously wounded, by striking his head in falling on an iron hook which projected from the wall. There was a wound about two inches long in the right parietal region, between the lips of which some pieces of brain were lying ; and it was reported that a larger portion of it had been observed on the ground by the people who raised him. He was cold and insensible, with a weak pulse about 60. Bottles of warm water were applied to the feet ; a little spirits and water administered from time to time. He became sensible about an hour after admission, but remained very confused. Eight o'clock on the following morning, his pulse being 95, and strong, fourteen ounces of blood were taken from the arm. The wound of the scalp was dilated ; and a large piece of bone, depressed obliquely inwards, was extracted, together with a quantity of matted hair. He continued sensible, and made no particular complaint for the two following days. He had regular evacuation of his bowels, but rejected food, and exhibited a remarkably pale and cada-

verous appearance. He then became restless, his left arm and leg were paralyzed, and his right arm was strongly contracted. Bleeding and other means were used in vain ; he became quite insensible, with laborious breathing, and died on the evening of the 12th.

On dissection, a dark-coloured mass, about the size of a walnut, was observed to project from the opening of the *dura mater*, through that of the cranium ; and when a section was made through it, together with the subjacent brain, the convolutions of the latter expanded, softened, and injected with blood, could be distinctly traced into the tumour, the principal part of which, however, was composed of coagulated blood. The right hemisphere of the brain was much collapsed, and covered with a pretty thick *coagulum* over its whole surface. The cerebral substance in the immediate neighbourhood of the injury was reduced to a pulpy consistence, and tinged of a blood-red colour. In other parts it presented nothing remarkable.

The first of these cases illustrates the bad consequences of punctured fractures, when the depressed fragments are not removed in the first instance. The second affords an exception to the general rule, that such injuries, unless so treated, are always followed by serious disturbance of the cerebral membranes or substance, but ought not to invalidate the general induction of experience, and render doubtful the propriety of applying the trephine in similar cases, if an opportunity is afforded, immediately after the infliction of the wound. The third case is chiefly interesting, in so far as it confirms the now generally received opinion of the nature of *hernia cerebri*, which has been the subject of dispute. There can be no doubt, from the observations on record, that such excrescences depend upon softened cerebral substance mixed with blood ; and their production seems referable not to mere exposure of the brain by removal of its coverings, nor to inflammation of it, nor to effusion of blood into its texture, but to a combination of all these circumstances.

*Fistula Lacrymalis, treated by introducing a tube, with success.*—Jane Penman, aged 41, Newbattle.—The usual treatment of obstructed lacrymal duct, with or without fistula, by means of a style, is very unsatisfactory, as the relief thus obtained is seldom complete, and almost never permanent. The objection to employing a tube is the irritation to be expected from its presence, and the difficulty of withdrawing it after being lodged in the passage. As this method is in all other respects superior to any that has been devised hitherto, it is of importance to determine how far the anticipated danger of bad consequences is real, and therefore cases ought to be recorded in order to decide

the question. The subject of the present case suffered no inconvenience whatever from the operation, and was immediately relieved by it from her former complaints. She returned from the country (eight miles distance) some weeks afterwards, to show that she continued quite well, and has not applied since, though strictly enjoined to do so in case of feeling any uneasiness.

*Double Hare-lip in an adult remedied by one operation.—* Norman Robison, æt. 17, Dysart, admitted September 20th.—In this case there was no malformation of the jaws or palate, and the portion of lip which lay between the two fissures, though it presented a nipple-like appearance, being of a triangular form, and shorter extent than the parts on each side, was natural in its consistence and connections. The respective edges having been rendered raw by removing a slice from each by means of a sharp-pointed knife, a needle was passed through them, so as to transfix the apex of the intermediate portion, which was about midway between the nose and edge of the lip. Two other needles were then introduced, one being close to the *prolabium*, and the other at the margin of the nostrils. The edges of the wounds were brought into exact contact by threads applied round the needles. They united completely by the first intention, and the patient was dismissed with a greatly improved appearance on the 2d of October.

*Single Hare-lip in an adult.—* John Scott, æt. 21, Selkirkshire, admitted January 8th.—In this case there was a fissure of the palate throughout its whole extent, and considerable irregularity of the adjoining edges of the alveolar process. The operation had been performed when he was two years of age, but failed, owing to his restlessness afterwards. One of the incisors, which projected between the edges of the fissure, having been removed, the corresponding surfaces were prepared for union in the usual way with the knife, which was rather difficult, in consequence of the induration of the cicatrices that had resulted from the former attempt. A needle was introduced close to the margin of the lip, and then two stitches of the interrupted suture were employed to draw the remaining portion of the edges together, as the latter means seem less apt to occasion troublesome ulceration than the twisted suture, when the parts to be joined are put upon the stretch. The cure was completed without any unfavourable occurrence, and the patient returned home on the 21st.

*Hare-Lip in a Child—Malformation of the Jaw—Operation postponed.—* Grace Crerar, æt. 2, Kenmore, admitted August 30th.—This was one of those cases in which the central part of the superior maxillary bone is produced into a round

knob, having the corresponding portion of lip attached to its anterior surface and to the *columna nasi* in the form of another similar, but smaller knob. Behind this projection there was a very broad fissure, or rather deficiency of the palate, throughout its whole extent. As the intermediate portion of lip could not be rendered serviceable, owing to its situation and connection, it was removed, together with the malformed part of the jaw, and then the cheeks were drawn together by means of adhesive plaster, so as to prepare them for permitting the edges of the lip to be united. After a careful trial of this plan for several weeks, it appeared, that no material advantage had been obtained, the child being so strong and unruly, as to render it impossible, even with the hands, to retain the sides of the fissure in approximation ; and it was therefore judged prudent to delay making any attempt to effect adhesion until the child acquired more docility, and until the two halves of the jaw became closer, as they might be expected to do in course of time, after the removal of the central portion.

*Tumour of the Lower Jaw removed with success.—Margaret Walker, æt. 26, Cupar, admitted November 13th.—*The morbid growth occupied the gum and alveolar process of the incisor teeth. It was the size of a small walnut, and possessed a firm consistence, pretty smooth surface, and dark colour. It projected equally on the inner and outer sides of the jaw, and appeared to be deeply rooted, as all the cutting teeth were loose. The patient stated, that the tumour began to grow nine months before, and had gradually increased. It being resolved to make a very free removal of the diseased parts, the two canine teeth were extracted, after which an incision down to the bone was carried completely below the base of the anterior surface of the tumour, the bone that lay between the sockets of the canine teeth was divided by a pair of strong cutting forceps, and then the remaining attachments were readily separated with the knife. The wound healed perfectly ; and it was suggested to the patient, that, when the parts became quite callous, she might have the six teeth that had been removed, which were all quite sound, artificially fixed to the jaw.

*Acute Swelling of the Tongue, threatening Suffocation, remedied by fomentations and purgatives.—Thomas Nicol, æt. 19, Edinburgh, admitted January 2.—*My assistance was required late in the evening on account of this patient, whom his friends represented as in danger of immediate suffocation, owing to an enlargement of the tongue which had suddenly taken place. He had been exceeding very much in the use of ardent spirits for some days previously, and had been exposed to cold.

The tongue began to swell on the preceding evening, and had rapidly increased during the day. It was found on examination, that, though the tongue was very much enlarged, and otherwise altered in its appearance, being of a globular form, and quite dry on the surface, it did not much impede respiration. Instead, therefore, of making the deep longitudinal incisions recommended by M. De La Malle,\* which have been found the most effectual remedy in such cases, it was thought sufficient to prescribe fomentations to the throat and an active purgative, with instructions that the patient should be carefully watched during the night, lest more efficient means might become necessary. Next morning he felt much easier, and was able to articulate with tolerable distinctness. The tongue was moist, but still retained its globular form. The same treatment was continued, and with success, so that, on the following day, hardly any trace of the disease could be perceived.

*Ligation of the Carotid Artery on account of Hæmorrhage from the Ear and Fauces.*—Though this case was not treated in the Hospital it deserves to be related, from the unusual circumstances with which it was attended. I am indebted to Mr Cheyne of Leith for the following history of it :—

“ William Mason, a delicate boy, 9 years of age, complained in the latter end of August 1832 of a soreness in the left *fauces*. This ceased in two days. About a week afterwards, viz. on the 29th August, he was seized with pain and swelling of the right *fauces* and smart accompanying fever. The fever left him in a day or two, but there remained a painful external swelling situated between the upper part of the larynx and the mastoid muscle. This increased gradually, extending upwards to the jaw, and finally to the tube of the external ear.

On the night of the 8th September a discharge of pus took place from the *meatus externus* of the ear, and it continued till the following evening. A tea-cupful probably was the quantity altogether discharged. The latter portions were tinged with blood. Soon after the discharge of pus had ceased, the ear having been lightly bound up, the boy raised an alarm in consequence of a flow of blood from the ear. Upon removing the bandage it continued profuse for a short time. It then ceased. Some ounces appeared to have been lost. A compress and bandage were applied. The swelling dependent on the abscess had disappeared entirely.

13th.—A fresh bleeding from the ear. Sponge introduced with compress and bandage over it. Since the 9th, (the date of the first bleeding,) a swelling has been formed between the

\* Mem. de l'Acad. de Chirurgie, T. v.

angle of the jaw, mastoid process, and external tube of the ear, it has no pulsation.

16th.—The swelling considerably increased ; it now extends downwards bordering on the *larynx*. On examining the mouth, a swelling is perceived like that produced by an enlarged tonsil pushing forward the anterior curtain of the palate, and insinuating itself between the jaw and lining membrane of the mouth : it is rather pale in colour, soft and elastic. The following symptoms are present : considerable difficulty of breathing and swallowing, imperfect articulation, frequent hawking of phlegm from the throat, difficulty of closing the jaws, difficulty of lying down, very uneasy expression of the countenance, with constant watering of the eyes. The pulse of the temporal artery to be distinctly felt.

18th.—In the evening he discharged suddenly from the mouth two or three ounces of florid blood. For a day or two before this the phlegm from his throat had been tinged with blood. The case appearing to be one of extreme hazard, and the object of present apprehension, hemorrhage, likely to be fatal, either by its quantity or through the vicinity of the *trachea* by causing suffocation, it was suggested by Dr Combe to tie the common carotid artery, and this operation was proposed to the parents. They, however, did not accede to it at that time. It was then agreed to request Mr Syme's opinion on the case. Mr S. having approved of the measure, it was again recommended (by him) to the parents, who now consented to it. The artery was then tied at the side of the larynx by Mr Syme.

October 1st.—Immediately after the operation an improvement in all respects took place, and has been gradually increasing till to-day. The operation itself gave rise to no inconvenience which would not have resulted from a simple wound of the parts. The external swelling decreased quickly, and is now gone. There still remains a slight internal swelling in the situation of the tonsil. No pulsation of the temporal artery. Since the first bleeding at the ear, there has always been an oozing from it of a thin bloody ichor.

On the evening of this day, while he was reading aloud, a profuse bleeding took place from the internal *fauces*, and at the same time from the ear. It soon ceased. About ten ounces were discharged in all. On examining the mouth some clotted blood was seen adhering to the right tonsil. He had been allowed incautiously to go out of doors in the forenoon, and had run about without restraint.

2d.—A tumour equal in size to the half of a hen's egg has been formed since last evening between the angle of the jaw, mastoid process, and tube of the ear. There is no increase of the swelling in the mouth.

6th.—The external swelling decreased in some degree. There has been no discharge of the ichorous fluid from the ear since the 1st inst.

In the evening a fresh discharge of blood from the internal *fauces* and nostrils, (from one source, however, the right side of the *fauces* as it appeared.) It soon ceased, but not before about twenty ounces were lost. Immediately after he had syncope. In two hours he had rallied, and was asleep with a pulse at 120.

8th.—In the evening, a bleeding from the *fauces* to the amount of eighteen ounces, followed by faintness and very small pulse.

After the 8th there was no return of bleeding, the swelling decreased, and he gradually recovered. For some time the right tonsil appeared of a dark colour.

He is now as well as before the commencement of his illness.

Decr. 14, 1832."

*Punctured wound of Throat.*—Joseph Campbell, aged 17, Edinburgh, admitted January 1st.—The patient was pursued by another boy, who inflicted various wounds in different parts of his body with a penknife. None of them were of any consequence, except one in the neck, where the knife had entered directly over the great vessels, but fortunately, instead of penetrating to them, had been turned towards the *larynx*, into which it appeared that an opening had been made, as there was a slight emphysematous swelling in the neighbourhood of the wound. He was bled, and kept on low diet for a few days, at the end of which he felt in all respects quite well.

*Cut-Throat—Recovery.*—James Paterson, æt. 46, Edinburgh, admitted January 9th.—The wound was inflicted with a razor, and literally extended from ear to ear. The *larynx* was exposed, but there was no opening into it or the *pharynx*; and the bleeding, though copious, did not proceed from any considerable artery. After the hemorrhage had nearly ceased, a few stitches were introduced, and the patient's head was supported so as to press the sides of the wound together. They healed chiefly by the first intention, and the patient was dismissed cured on the 29th of the same month.

*Wry-Neck, depending on contraction of the Sterno-Mastoid, remedied by division of the muscle.*—Matthew Cullen, æt. 6, Dunbar, admitted November 2, 1832.—The head was much inclined to the left side, and could not be elevated, owing to the rigid contraction of the left sterno-mastoid, the sternal part of which felt like a tense cord. The complaint had existed upwards of twelve months, and had resisted blisters, with other similar means of remedy. The introduction of needles having been tried without any benefit, it was thought necessary to divide the contracted part of the muscle. This was effected by

entering a sharp-pointed narrow knife a little nearer the *trachea* than its sternal margin, about an inch above the clavicle, and then pressing the blade against the tense fibres. A sudden snap, which shook the patient's frame, was immediately perceived, and all trace of the contraction disappeared. The knife was withdrawn, and the small puncture occasioned by it in passing through the skin afforded the only perceptible indication of what had been done. No pain or other bad consequences followed, and the cure might be regarded as at once complete.

### *Thorax.*

*Necrosis of the Clavicle.*—John Henderson, æt. 26, Forgan, Fife, admitted January 21, 1833.—Sixteen weeks previous to the time of his admission he made a violent exertion in raising a cart that had been overturned. No inconvenience was immediately perceived, but a few days afterwards the upper part of the chest between the shoulder and *sternum* became the seat of inflammation, attended with great pain, swelling, and redness. Suppuration followed, and an abscess over the clavicle, which opened at the end of two weeks, continued to discharge a large quantity of matter. On examination a portion of the clavicle was found detached, and when extracted by forceps, after suitable dilatation of the opening in the integuments, it measured three inches in length, and comprehended the whole thickness of the bone only for about one inch. Some smaller fragments were subsequently removed, and the patient is now recovering, with the prospect of suffering no permanent deficiency, as the process of ossification seems to be going on vigorously. It was apprehended at one time that the sternal extremity of the clavicle would also have become detached, as a separate abscess had formed over it, and, when opened, presented the surface of the bone in a denuded state. This part, however, is now covered with granulations.

*Carcinoma of Mamma.*—Alison MacCulloch, æt. 57, Cupar, admitted October 15th. Elizabeth Winter, æt. 45, Edinburgh, admitted November 20th.—The operations in these cases were successful, so far as regarded their immediate effects; and, as they were conducted on the principle of making a careful extirpation of the whole glandular structure, together with as much as possible of the neighbouring tissues, it may be hoped, that the patients, if not permanently protected against relapse, will, at all events, have their existence prolonged.

*Cystic Sarcoma of Mamma.*—Jane Cameron, æt. 58, Stirling, admitted January 27.—About a year ago she perceived a small tumour in the left breast, on the axillary side of the nipple. It was not painful, but progressively increased in size. At the time of her admission it was fully equal in

bulk to a goose's egg, had a slightly and unequally nodulated surface, and an obscurely fluctuating consistence. At its most prominent part a slight livid hue was perceptible through the integument. The disease being regarded as of a cystic nature, the operation was undertaken with a favourable prognosis as to the permanency of the relief to be expected from it. The gland which adhered intimately to the tumour was taken away along with it to facilitate the operation, and prevent the troublesome oozing of blood that is apt to occur from incisions into the substance of the *mamma*. One artery only required a ligature; and the wound was quite healed on the eighth day. The tumour, when cut open, displayed an unusually perfect cystic structure, there being no solid substance entering into its formation, and merely a collection of cysts, containing a dark-coloured fluid.

*Chronic Abscess of Mamma.*—Ann Douglas, æt. 58, Auchtermuchty, admitted January 20th.—The right mamma presented a very malignant aspect, being enlarged, indurated, and pointing a little above the nipple. The axillary glands were slightly swelled. The patient persisted in affirming that the disease had not existed longer than a month, and therefore there seemed reason for regarding it as a simple abscess. An incision was made into the prominent part of the tumour, from which a quantity of thick pus escaped, and though the substance of the gland was much indurated the subsequent progress of the case was favourable. Under the use of stimulating liniments and sulphate of zinc lotions, the gland regained its natural consistence, the sore healed, and the patient was dismissed on the 20th of February.

### *Abdomen.*

*Ruptured Intestine.*—George Wilson, aged 20, admitted 31st August. About seven o'clock in the evening this young man fell from the driving seat of a carriage before the wheels, one of which passed over his abdomen; he was immediately afterwards carried to the Hospital. On admission he complained of intense pain all over the trunk, and dreaded the slightest motion, which greatly aggravated his sufferings. Next morning he was in much the same state, but, on the whole, rather easier. Early in the forenoon he was seized with dark-coloured vomiting, and, sinking rapidly afterwards, died at mid-day, eighteen hours after receiving the injury.

On dissection, thirty hours after death, the *parietes* of the abdomen, both before and behind, were found loaded with effused blood, and in the convex part of the first turn of the *duodenum* there was a longitudinal rent rather more than an inch long. The gut was of a pulpy consistence in the neigh-

bourhood of the injury, and there was a small quantity of intestinal matters effused about it.

### *Pelvis.*

*Sinus of the Hip.*—Andrew Forbes, æt. 26, Lanarkshire, admitted November 16th.—Some years ago I gave an account in this Journal of several cases in which sinuses of the hip and other parts of the *pelvis*, that had proved extremely obstinate, and existed for years, were found to depend upon the presence of small exfoliations from the bones. Succeeding observations have confirmed the opinion, that such cases are by no means uncommon, and that, when sinuses in this situation resist the ordinary means of remedy, while there is no evidence of their being connected with disease of the *vertebræ* or hip-joint, they may generally be referred to the source in question.

The young man whose case is now to be related applied on account of a chronic abscess at the upper and back part of the left thigh. There was also a smaller tumour seated over the tuberosity of the *ischium*, which seemed to contain a fluid; but the fluctuation was less distinct than in the other, and the two did not seem to communicate. The patient had a thin unhealthy appearance; but was quite free from disease, either of the hip-joint or *vertebræ*, so far as could be determined by a very careful examination. He stated that the swelling in the thigh appeared about two years ago, and gradually increased since; and that the smaller tumour of the hip was first noticed six weeks previous to his admission.

The lower abscess was opened first; and though after this was done the upper one could not be emptied, nor even diminished by pressure, at first, a communication between the cavities was ascertained to exist in the course of the following week; and then a free counter-opening was made with the knife into the upper tumour, which lay over the tuberosity of the *ischium*. When this cavity was examined with the finger, it was found to extend to the bone,—a small part of which could be felt bare and rough, but not moveable. In these circumstances, it seemed right to wait for the improvement that might arise from the free drain that had been afforded to the confined matter. Lotions and pressure, applied so as not to close the orifices of the sinuses, were used; but the discharge continued to be very profuse, and the patient's emaciation increased. Hectic symptoms appeared, and apprehensions were entertained for his safety. An improvement then gradually took place, the discharge diminished, and the general health became considerably better. In this state matters remained until the 24th January, when it was resolved to ascertain the precise condition of the diseased bone. With this view, the sinus of the

hip was dilated with a bistoury, guided by the finger,—which thus obtaining sufficient room, and being urged with considerable force, penetrated between the origins of the muscles, and detected a loose exfoliation, or rather several small exfoliations lying together. The extraction of these was effected with forceps, but not without a good deal of difficulty, owing to the great depth of their situation, and the contraction of the muscles. The patient improved every day after the operation, and was dismissed on the 9th of February.

One of the cases formerly related so closely agrees with this one, that it may be here quoted. "Thomas Irving, aged 28, a cooper in Leith, had laboured under sinuses of the hip for seven years; and latterly become so much reduced in health, as to be regarded by his friends as in a hopeless state.

I found a large diffused abscess occupying the upper and back part of the thigh, and extending from the hip half way to the knee. In the fold between the hip and thigh there was an opening, which allowed the probe to enter fully three inches in the direction of the tuberosity of the *ischium*, and at the bottom of this passage I felt a loose piece of bone. The patient was pale and emaciated. Owing to weakness and pain he walked with difficulty; and the long duration of his complaint, together with its progressive aggravation, rendered him very desponding as to the possibility of recovery.

I made an incision into the abscess, and allowed several ounces of pus to escape. Next day I introduced a long straight probe-pointed bistoury into the sinus, and dilated it to the bottom so as to admit my finger, by means of which I discovered that the exfoliation lay in a cavity between the origins of the flexor muscles of the knee. Having dilated the mouth of this cavity, I easily extracted the bone, which was about half the size of a sixpence.

The patient suffered no bad consequence from this operation, and soon found himself relieved from all his previous complaints. In the course of two or three days he walked nearly a mile to show himself, and by the end of two or three weeks was able to resume his occupation.

Some months afterwards he told me that the sinus still discharged a drop or two of matter, and that he occasionally felt a pricking pain at the bottom of it. I examined with a probe, and ascertained that there was a loose fragment of bone, to remove which I again dilated the sinus down to the tuberosity of the *ischium*; again felt that the exfoliation lay in a cavity between the tendons; and again enlarged the cartilaginous orifice so as to effect the extraction. The piece of bone now removed was extremely small, not much larger than a barley-corn. The

wound healed directly, and the patient has remained free from complaint."\*

*Fistula in Ano, complete ; repeatedly operated upon without success, from the internal opening being overlooked ; remedied by division of the septum between the two orifices.*—The patient stated that he had laboured under *fistula* for more than twelve months, and that various severe operations had been performed without relief. When the anus was examined, long cicatrices were observed on both sides of it, and near the verge a small opening, through which a probe readily passed into the gut about an inch above the orifice. While the finger that had been introduced into the *rectum* to assist in this examination still remained, a probe-pointed bistoury was conveyed through the *fistula* and brought out at the *anus*, so as to divide the *septum*. A little dressing was interposed for two days, and the patient returned home on the 11th December.

*Fistula in Ano, with Stricture of the Rectum.*—Mary Marny, æt. 51, Dundee, admitted August 22d.—The *fistula* was complete, and communicated with the gut about an inch distance from the orifice ; the stricture being a little farther up, so as to be readily reached with the fore-finger, the point of which it admitted with difficulty. The patient had laboured under her complaints for upwards of two years, and applied with little expectation of relief, as she had been regarded as incurable.

The *septum* between the two orifices of the *fistula* having been divided in the usual way, the dilatation of the stricture was proceeded with, by introducing steel bougies, of gradually increasing sizes, every third or fourth day. The recovery was delayed by a troublesome tendency to diarrhoea ; but at length, being advanced so far that little uneasiness remained, instead of the almost incessant and severe suffering formerly experienced, she was dismissed on the 3d of November.

*Fistula in Perineo, with Stricture and Calculus of the Urethra.*—Robert Reid, æt. 37, Hawick, admitted October 4th.—About twenty years ago, this patient received a kick in the *perinæum*, which occasioned an abscess of this part, and difficulty in making water. When the abscess opened, the urine escaped through it, and had by degrees almost entirely ceased, to pass by the orifice of the *urethra*. Seventeen years ago he was admitted into the Royal Infirmary, where he remained six weeks, and was then dismissed as incurable, it having been found impossible to introduce even the smallest bougie or catheter through the stricture. He continued ever since in nearly the same state as to his urinary ailments ; but suffered also derangement of general health, from exposure to cold and wet

in the course of his occupation as a mason. He complained of rheumatism, indigestion, and a nervous affection of the face, which destroyed the sensibility of the left side of the cheek and tongue. For some time previous to his application at the Hospital, he had experienced unusual difficulty and pain in making water.

On examination of the *perineum*, three fistulous openings were found. The neighbouring integuments were greatly thickened and indurated, so as to present a callous mass, having on its surface irregular cauliflower-looking excrescences, which occupied the space between the *scrotum* and *anus*. The *urethra* was strictured in several places, but particularly at the bulb. A small silver catheter having been introduced into the bladder without much difficulty, the usual treatment of stricture, by means of steel bougies, was commenced. As the patient did not experience relief commensurate with the advance of dilatation, a search was made in the fistulous canals for urinary concretions, and several small ones, like split peas, were extracted. Still the uneasy symptoms continued, and strongly indicating the presence of a stone in the bladder, led to a very careful examination of its cavity, when a small concretion was detected. The process of dilatation being pursued, in the expectation of gaining room for the admission of a moderate sized lithotomy staff, was at length arrested by the calculus which escaped from the bladder, and obstructed the urethra. The principal sinus was laid open with a bistoury, so as to permit the stone to be extracted. It resembled in shape and size a large renal calculus. Some of the callosities in the *perineum* were then removed, and the treatment of the stricture pursued. The patient returned home on the 7th of January, making water in a full stream by the *urethra*, and passing merely a few drops through the *perineum*, which had nearly regained its natural appearance and consistence.

*Lithotomy.*—Thomas Hewitt, æt  $2\frac{1}{2}$ , admitted November 21st.—The operation was performed on the 23d in the usual way, and a stone about an inch in diameter extracted. The whole of the urine passed by the *urethra* on the ninth day, and the patient left the Hospital on the 4th of December. I performed the same operation three years before on a half-brother of this boy, i.e. a son of the same father, but a different mother.

Though it is now admitted that the opening which is made into the bladder for the extraction of stones should be effected by cutting, and not by tearing, some difference of opinion still exists as to the extent of incision which is requisite for the purpose. With the view of obtaining some fixed data for determining this question, the following experiments were made with

the assistance of my friend Dr Sharpey, and verified by repetition. A bladder and *penis* from an adult were freed by dissection from all their surrounding coverings. 1. The membranous part of the *urethra* was divided through its whole extent from the bulb to the prostate. The incision measured  $\frac{3}{4}$  of an inch. A pair of small dressing forceps having been introduced into the bladder through this aperture, were withdrawn as much expanded as possible, and the distance between the points of their blades was found to measure  $\frac{3}{4}$  of an inch. A bullet  $\frac{5}{8}$  of an inch in diameter was introduced into the bladder by another opening, and pressed with great force against the former one, but could not be squeezed through it. 2. The prostate gland was then divided at an angle of forty-five, as in performing the lateral operation, to the extent of  $\frac{3}{4}$  of an inch measured on the outside; but as this was done by pushing the knife along a staff into the bladder, the incision of course extended farther on the inner side. The bullet formerly tried could now be pushed through with ease, and also one  $\frac{5}{8}$  and  $\frac{1}{16}$  of an inch in diameter, but one of  $\frac{7}{8}$  and  $\frac{1}{32}$  could not be forced through. The whole of the prostate was next divided the length of the incision through the gland, measuring 1 inch and  $\frac{1}{4}$ . The last mentioned bullet passed out with ease through this aperture, and one of 1 inch,  $\frac{1}{4}$ , and  $\frac{1}{32}$  could be passed through with slight laceration of the neck of the bladder. In attempting to pass larger bodies through the wound it was ascertained that no additional space could be obtained from stretching, and that whatever more room was gained proceeded from rupture of the mucous membrane, and separation of the muscular fibres which did not require much force. It may be observed, that the bullets employed in these experiments were selected at random, and measured afterwards.

*Warty Excrescences from the verge of Anus removed by Excision.*—David Lindsay, æt. 22, Edinburgh, admitted January the 7th.—The excrescences formed a tumour the size of an orange surrounding the *anus*. The patient had laboured under it for six months, and been treated without benefit for two months at a Dispensary by the application of lotions, &c. The whole of the morbid growths were cut away by curved scissors, and the patient was dismissed quite well on the 26th.

*Complicated Tumour of the Scrotum.*—John Russell, æt. 70, Edinburgh, admitted December 5th.—The *scrotum* was enlarged to the size of his head. The swelling depended in part upon a reducible inguinal hernia; and the remainder, in nearly equal portions, consisted of a solid mass that seemed to be the testicle enlarged, and of a fluid that was supposed to be contained in the *tunica vaginalis*. The integuments covering

the anterior surface of the tumour were inflamed, and at the centre of this part sloughing seemed to be commencing. The patient gave a very confused account of his case ; and all that could be learned with certainty was, that he had laboured for many years under rupture and swelled testicle.

Stimulating dressings were applied to the gangrenous part of the scrotum, and the slough was cut away by degrees as the sphacelation proceeded. The sore under this treatment soon presented a clean granulating surface. It was then thought right to draw off the fluid, which proved to be not serum but pus. The opening made by the trocar was then dilated ; and it appeared, from the thickness of the *parietes*, that the *tunica vaginalis* must have been greatly thickened, or that the abscess must have been contained within the substance of the testicle. The discharge continuing very profuse and foetid, the opening was dilated so as to admit a finger, by which some loose substance was felt, and next day a membranous-looking slough presented itself at the orifice of the wound. This, when withdrawn, measured more than three inches in length, and one and a-half in breadth. It presented the appearance that might be expected from a thickened *tunica vaginalis* detached by sloughing. Some smaller portions of a similar nature escaped subsequently, and the tumour not only contracted, but exhibited symptoms of improvement in the diminution of the quantity, as well as fetor of the discharge. Still the opening showed no disposition to close, and another search was therefore made with the finger, when a quantity of gritty matter was encountered, and several pieces of membranous substance, containing a deposition of earthy matter, similar to what constitutes ossification, as it is usually called, of the arteries and other soft tissues. The discharge rapidly diminished after this, and the patient was dismissed cured on the 19th February.

### *Extremities.*

*Excision of the Elbow-Joint.*—James Topings, æt. 17, Shotts, admitted August 17th.—The elbow was enlarged, and admitted of very little motion. A *sinus* over the internal tuberosity of the *humerus* allowed a probe to reach the bone and enter into the joint. The disease had existed upwards of twelve months, and was becoming progressively aggravated. The articulation was excised in the usual manner on the 1st of September. No bad consequences followed ; and the patient was dismissed on the 22d October. He returned some weeks ago to show how well he was, there being no discharge from the wound, and the arm being not only moveable, but already under the voluntary command of the muscles.

*Amputation of the Fore-Arm.*—Ann Fraser, æt. 23, Edin-

burgh, admitted 13th September.—This was a case of whitlow of the fore-arm, if the expression may be used. It commenced with intense deep-seated inflammation in the neighbourhood of the *carpus*, which speedily led to suppuration of the bones and joints. The matter pointed on both sides of the arm, and after free openings had been made for its escape, the limb was carefully dressed and bandaged, in the hope that a cure by ankylosis might be accomplished. The discharge, however, instead of diminishing, became more profuse, and the patient's strength declined so rapidly that amputation could not be safely delayed any longer. The operation was performed by double flaps, about the middle of the fore-arm, on the 9th October. The *radius* was found to be dead and detached from the surrounding parts, but the *periosteum* fortunately adhered at the distance of little more than an inch above the place where the bone was first exposed. The patient made a good recovery, and was dismissed on the 16th November. On dissection of the limb, the carpal articulations were found extensively diseased.

*Amputation of the Fore-Arm.*—Jane Paton, æt. 18, Inverkeithing, admitted 8th July.—The case of this patient was mentioned in last Report as an exception to the general rule, that ulceration of a dense bone, which has been expanded in its tissue in consequence of the irritation resulting from local injury, is irremediable except by removal of the affected part. The similar condition of the shafts of the long bones, which is met with in persons whose constitutions have been injured by the combined effect of mercury and venereal disease, yields to blistering and lotions, such as the black-wash. But I never knew an instance of ulceration occurring in the former way remedied except by amputation. This young woman sustained a kick from a cow on the fore-arm about fourteen months ago. The ulna enlarged throughout nearly its whole extent, while the superjacent integuments ulcerated at several points, where a probe could be pushed into the substance of the bone, no longer of a dense consistence but granular, as if its component particles had suffered disintegration. Before proceeding to amputation, which it was feared would prove the only remedy, a trial was made of blisters, which, contrary to expectation, produced a great improvement. The ulcers closed, and the patient was dismissed as cured on the 24th of August. She returned on the 9th of October nearly in the same state as when first admitted. The blisters were again employed, but not with the same good effect as formerly; and an attempt was then made to remove the disease, by exposing the bone and gouging out the softened part of it. As no benefit was thus obtained, it did not seem right to delay any longer, and the limb was removed immediately below the elbow-joint on the 17th January.

The operation was effected by making a large flap from the palmar or fore-side of the arm, and a small one from the back part. About a week afterwards a profuse hemorrhage took place from the stump very unexpectedly, without any previous complaint, and required the introduction of graduated compresses to correct it, which was not accomplished until two pounds of blood by computation had been lost. She recovered without any other bad symptom, and was discharged on the 19th February.

*Amputation of the Thigh.*—Elizabeth Scott, aged 6, from St Andrews, 17th October.

This was a common case of white-swelling, which had existed two years, and arrived at its last stage, viz. that of ulceration. On dissection it appeared that the disease had originated in the synovial membrane. The patient was dismissed on the 14th of November.

*Contraction of the Arm, from cicatrization of a Burn, remedied by continued Extension.*—Ellen Gibson, æt. 10, Edinburgh, admitted September 13th.—The arm was kept bent at an acute angle by a thick and broad cicatrix, which had resulted from an extensive burn caused by the clothes taking fire four months previous to the time of application. A large ulcerated surface still existed on the back part of the shoulder and side; but the object of bringing the girl to the hospital was to get the arm straightened if possible. It was evidently not practicable to effect this by excision of the cicatrix, and the patient was dismissed with a supply of proper lotions for the ulcer. She returned soon afterwards, and had the importance of even a partial removal of the contraction so strongly represented, that it was resolved to make an attempt to effect it by permanent extension. With this view, an iron wire doubled, so that the branches were about an inch distant from each other, and bent to an angle somewhat less acute than that of the elbow, being covered with flannel, was fastened to the arm by a bandage. Every succeeding day the angle of the wire was rendered more obtuse. In the course of six weeks we had the pleasure of seeing it quite straight. The patient was dismissed on the 12th of December, and continues quite well.

*Tendo Achillis divided accidentally.*—Archibald Pennycuick, æt. 17, Edinburgh, admitted September 20th.—The young man while working with a carpenter's adze, cut across the *tendo Achillis*. The case was treated as one of simple rupture, and healed as readily.

*Exostosis from the distal phalanx of the great toe.*—One case of this kind occurred, and was remedied by simple removal of the exostosis, without resorting to the severe measure of amputation which has been recommended on such occasions.

*Dislocation of the Ankle backwards.*—Three cases of this accident presented themselves, and were treated successfully by the method of Dupuytren, which consists in pressing the heel forwards by means of a thick cushion fastened on the back part of the leg from the heel up to the calf, and a splint of wood placed over it, which is drawn towards the leg and foot with whatever force may be found necessary. In all of these cases the *fibula* was fractured. In one of them the bones had been allowed to remain unreduced eleven days, from its being erroneously supposed that this was merely a strain. Owing to the contraction of the muscles that had gradually taken place during this period, very strong extension was required for effecting the replacement of the articular surfaces.

*Insects supposed to be evolved from the palms of the hands.*—Jane Dunnett, æt. 18, Caithness, admitted 28th December. This young woman came from a remote part of Caithness in the firm belief that a number of small black insects were constantly escaping from the pores of the skin of her hands; and it appeared that many sensible persons, both in and out of the profession, had been persuaded by her sincere, though absurd relation, that her complaint was not imaginary. She was directed to take aloetic pills in sufficient quantity for procuring at least three evacuations of her bowels daily. She soon felt relieved, and her menstrual discharge, which she now confessed had been suppressed since the commencement of her complaint, becoming restored, the cure was complete in the course of ten days, and she returned home, carrying a box of the pills, which she regarded as of inestimable value.

Of many minor operations, such as amputation of fingers and toes, *fistula in ano*, *hydrocele*, polypus of the nose and ears, cancer of the face, tumours, encysted and solid, &c. it does not seem necessary to give the particulars.







